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Specimen Book

Σ = Fossil Specimens
Φ = Living Specimens

Q1 Ocotea guayaensis (Laura tamancao)
given by Professor Fritz of U. of California
Series III Slides made.

Q2 Sapindus drumondii
Collected by Fisher Company in Texas
and donated by Professor Fritz of U. of California
Series III Slides made

Q3 Sapindus marginatus
Collected by C. S. Sargent in Florida about
the year 1880 and donated by Professor Fritz of
the U. of California.
Series III Slides made

Q4 Sapindus saponaria
Collected by C. S. Sargent in Florida and
donated by Prof. Fritz of the U. of California
Series III Slides made

Q5 ~~Hypoleste~~ Ehretia paniculata ~~trifoliata~~ Inkwood
Collected by C. S. Sargent in Florida and
donated by [illegible] Fritz of the U. of California
 Series III Slides made.

#6 Condalia ~~sp.~~ obovata Hook. Bluewood
Collected in Phoenix, Arizona, by C.S. Sargent and donated by Prof. Fritz of the U. of California.
Series III. Slides made.

#7 Conocarpus erecta
Collected in Florida by C.S. Sargent and donated by Prof. Fritz of the U. of California.
 Series III. Slides made

#8 Bursera gummifera
Collected in Florida by C.S. Sargent and donated by Prof. Fritz of the U. of California.
 Series III. Slides made

#9 Ehretia elliptica
Collected in Texas by C.S. Sargent and donated by Prof. Fritz of the U. of California.
Series III. Slides made

#10 Fraxinus americana
Donated by Carey Hill at the U of California.
Series II.

Q11 Umbellularia californica
Donated by Carey Hill - U of California.
Series II Slides made

Q12 Pinus lambertiana
Donated by Carey Hill - U of California
Series V Slides made.

Q13 Sequoia sempervirens
Donated by Carey Hill - U of California
Series V Slides made

Q14 Prosopis juliflora
Collected at Bridgeport, Texas by L.N. Daugherty on Dec 28, 1931.
Series II

Q15 Lithocarpus densiflora
Donated by Carey Hill - U of California
Series II Slides made

Q16 Tamarix gallica Slides made
Collected by L. N. Daugherty on San Jose State Teacher's College Campus. Sten Wood. 10/20/31.
Series II.

#17 Ulmus americana
Collected by L. H. Daugherty on San Jose State Teacher's College Campus 10/20/31.
⊞ Series II

#18 Populus sp.
Collected by L. H. Daugherty on Adam's farm at edge of Bridgeport Texas. 12/28/31.
◫ Series II

#19 Pittosporum eugenioides
Collected by L. H. Daugherty on San Jose State Teacher's College Campus 10/20/31. Stem wood.
⊠ Series II Slides made

#20 Prunus persica (Peach)
Collected on Hensel's ranch near San Jose on 3/1/32 by L. H. D.

#21 Juniperus occidentalis
Donated by Lake Hill in Dr. Meinecke's office in the Ferry Building at San Francisco.
⊠ Series VI Slides made. ~~Slides made.~~

Ø22 Chamaecyparis lawsoniana
Donated by Carey Hill - U of California
Series VI Slides made.

Ø23 Chamaecyparis nootkatensis
Donated by Carey Hill - U. of California.
Series VI Slides made.

Ø24 Quercus kelloggii
Donated by Carey Hill - U of California.
Series VII

Ø25 Libocedrus decurrens
Donated by Carey Hill - U. of California
Series VI Slides made.

Ø26 Alnus oregona
Donated by Carey Hill - U. of California

Ø27 Picea sitchensis
Donated by Carey Hill - U of California.

Ø28 Pseudotsuga taxifolia
Donated by Carey Hill - U. of California
☐ Series V Slide made

Ø29 Tumion californicum
Donated by Carey Hill - U. of California

Ø30 Sequoia gigantea
Donated by Carey Hill - U of California.
☐ Series V Slide made

Ø 31 Arbutus menziesii
Donated by Carey Hill - U of California

Ø32 Zelkova serotina
Collected on San Jose State Teachers College Campus - 2/26/32. Base of large branch Collected by L.H. Daughtry.

Ø33 Acer sp.
San Jose State Teacher's College Campus - 2/26/32.
Stem wood.

Ø34 Populus trichocarpa
Collected on Stanford Campus 8/14/31.
Stem wood of young tree.

Ø35 Fraxinus oregona
Stanford Campus near Robie Bridge 8/14/31.
Stem wood of young tree.

Ø36 Quercus virginiana
Collected by I.H. [illegible] at Beaumont,
Texas - 12/28/31.
Series VII ☒ 5 slides made

Ø37 · Eucalyptus globulus
Donated by Lake Hill - S.F. - Army Bldg.

Ø38 Pinus brutia
Donated by Lake Hill - Army Bldg.
☒ Series I Slides made.

Ø39 Pinus ponderosa
Donated by Lake Hill - Army Bldg.

Ø 40 Abies magnifica
Donated by Lake Hill - Ferry Bldg. S.F.

Ø 41 Acer macrophyllum
Collected on San Jose State Teacher's College Campus
1/25/32.

Ø 42 Abies concolor
Donated by Lake Hill - Ferry Bldg.

Ø 43 Thuja plicata
Donated by Lake Hill - Ferry Bldg.

Ø 44 Acer oregona
Donated by Lake Hill - Ferry Bldg.

Ø 45 Alnus rhombifolia
Stanford Campus near Robie Bridge. 8/14/31

Ø 46 Pinus lambertiana
Donated by Lake Hill - Ferry Bldg.

Ø 47 Cercis occidentalis
Collected at Bridgeport, Texas 12/28/31.

Ø 48 Celtis mississippiensis
Collected at Bridgeport Texas 12/28/31.

Σ 49 Sequoia ? sp. (Pleistocene or older)
A fossil partially carbonized (coal) and partially silicified. This was found in an open peat bog at Huntingdon, B.C. and since it must have been under pressure at one time it could not have formed in the open peat bog. It possibly washed in from some other place.

Σ 50 Sequoia sp. (?A)
Silicified wood from Calistoga California. Donated by Prof. F. Burs of Stanford.

Σ51 (1337 - 3748C) Oligocene

Donated by Dr Ralph W Chaney.
This wood is from Gray's Ranch in the
John Day Basin of Oregon.

Σ52 Sequoia sp. Pliocene
Collected by W. Kartchner of the San Jose State
Teacher's College at Santa Rosa, California.

Σ53 Tsuga sp. Pleistocene
Wood collected in a Pleistocene deposit
in the state of Washington.

Σ54 (283B - 1381) Oligocene
Silicified wood of John Day Basin,
Oregon. Collected by R. W. Chaney.

Σ55 (3942 - 1362) Oligocene
Silicified wood of John Day Basin, Oregon.
Collected on Dike ranch by R.W. Chaney.

Σ 56 (98a – 1364) Oligocene
Silicified wood collected at Dreis ranch in the John Day Basin, Oregon by R.W. Chaney.

Σ 57 (66-B – 1370) Oligocene
Silicified wood from Dreis Ranch John Day, Oregon. Col. R.W. Chaney.

Σ 58 (34B – 1357) Oligocene
Silicified wood from Dreis Ranch, Oregon.
Col. R. W. Chaney.

Σ 59 (1336 – 3748T) Oligocene
Silicified wood from Dreis Ranch, Oregon.
Col. R.W. Chaney.

Σ 60 (3748C – 1337) Oligocene
Silicified wood from Dreis Ranch, Oregon.
Col. R.W. Chaney.

Σ 61 (91a - 1338) Oligocene

Silicified wood from Dreyf's Ranch, Oregon.
Col. Ralph W. Chaney.

Σ 62 (98E - 1335) Oligocene

Silicified wood from Dreyf's Ranch, Oregon
Col. Ralph W. Chaney.

Σ 63 Cercis blackii Pleistocene (Cercis ~~blackii~~ blackii Chaney & Daugherty)

This specimen of wood was obtained with the bones of Sinanthropus a Chinese ape man. It was in a partially charred condition and appeared to be torch wood. The location was Choukoutien. "Wood recovered from debris around bones at Quartz Horizon #2. December 1931." The wood was collected by Davidson Black and was from the fireplace of Sinanthropus. This wood was called Cercis blackii Chaney & Daugherty in the paper published by Geol Soc of China.

Note See Σ 146 for undescribed species of Juglans found with this wood.

Σ 64 Ochroma sp. "Balsa

Given by Mrs. Audrey Moore of Stockton, California. This wood is from South America and is used in the construction of aeroplane models, ice boxes, boats etc. It is the lightest known wood.

Φ 65 Toxylon pomiferum

Series IV

Wood donated by Jon Rogers
April 10, 1932. Slides made

Φ 66 Sassafras variifolium Kuntze (S. sassafras)
Wood donated by Prof. Fritz from the collection at the University of California.
April 25, 1932. Slides made

Series IV

Σ 67 Araucarioxylon ? Triassic of Arizona

Fossil from the collection at San Jose State Teacher's College. Donated by Kartchner.
Jan 20, 1932.

Σ 68 Palmoxylon Tertiary? of Santa Lucia Is.

This fossil was collected by Dr. R. W. Chaney on a small island near Cuba and was the first fossil found on the island. Collected Dec 15, 1931.
The slides show perfect microscopic structure.

Σ 69 Tertiary?
Wood collected at Kirker Creek north of Mt. Diablo, California by Herbert Mason.

Σ 70 Platanus Upper Eocene or Miocene
Fossil collected by Herbert Mason at Specimen Ridge, Yellowstone National Park. 5 slides made. This specimen shows perfect microscopic structure and is a typical Sycamore.

Σ 71 ~~Fagus?~~ Platanus Upper Eocene or Miocene
Collected by Herbert Mason at Specimen Ridge, Yellowstone National Park in 1928. Slides made

Σ 72 ~~Fagus~~? Platanus Upper Eocene or Miocene
Collected by Herbert Mason at Specimen Ridge, Yellowstone National Park in 1926.

Σ 73 ~~Fagus~~? Platanus Upper Eocene or Miocene
Collected by Herbert Mason at Specimen Ridge, Yellowstone National Park.

Σ 74 Pityophyllon — Upper Eocene or Miocene
Collected by Herbert Mason at Specimen Ridge (Type Locality), Yellowstone National Park.

Σ 75 Quercus sp. — Upper Eocene or Miocene
Collected by Herbert Mason at the Yellowstone Fossil forest in 1929.

Σ 76 — Upper Eocene or Miocene
Collected by Herbert Mason at Specimen Ridge, Yellowstone National Park - 1929.

Σ 77 Quercus sp. ? — Tertiary ?
Collected near Antioch Bridge December 1931.

Σ 78 Juglans ??
Collected near a locality of the Goshen and thought to be the same age by R.S. LaMotte. This is doubtful for no gymnosperms have been found in the Goshen and some of the fossil woods were gymnosperms.
(Slide = Goshen #4 - R.S. LaMotte)

Ø 79 Melia azedarach L. var. umbraculifera Sargent.
Collected on May 16, 1932 near the San Jose Teacher College Campus. The wood is from a large branch.
Slides made.

Series IV

Σ 80 Araucarioxylon ? Triassic of Arizona
Donated by Wayne E. Hartchner.
This fossil appears to have good microscopic structure.

Ø 81 Corylus rostrata var californica A. D.C.
Collected in redwoods about five miles from Santa Cruz, California. May 22, 1932.
The wood was from a young stem about 2 inches in diameter
Slides made.

Series IV

Ø 82 Thuya plicata
From the set of samples given me by Professor Fritz of U.C.
☐ Series V Slides made.

Ø83 Juniperus virginiana
Specimen 46 from the set of woods donated by Prof. Fritz.
Series V Slides made

Ø84 Thuja occidentalis Northern White Cedar
Specimen 35 from the Fritz set of woods.
Series V Slides made

Ø85 Pseudotsuga taxifolia
Specimen 17 from the Fritz set.
Series V Slides made

Ø86 Tsuga canadensis
Specimen 11 from the Fritz set.
Series V Slides made.

Ø87 Tsuga heterophylla
Specimen 9 from the Fritz set.
Series V Slides made.

Ø88 Larix americana (laricina Koch.)
Specimen 52 from the Fritz set.
Series V Slides Made

Ø87 Salix occidentalis
Specimen 7 of the Fritz set.
Series V 5 slides made

Ø90 Torreya californica
Specimen 13 of the Fritz set.
Series V 5 slides made

Ø91 Pinus resinosa
Specimen 45 of the Fritz set.
Series V 5 slides made

Ø92 Pinus banksiana
Specimen 29 of the Fritz set.
Series V 5 slides made

Ø93 Pinus monticola
Specimen 23 of the Fritz set.
Series V 5 slides made

Ø94 Abies magnifica
Specimen 21 of the Fritz set.
Series V

Ø95 Abies nobilis
Specimen 4 of the Fritz set.
Series V

Ø96 Cupressus macrocarpa
Specimen #3 of the Fritz set.
Series VI Slides made.

Ø97 Abies grandis
Specimen 8 of the Fritz set.
Series VI

Ø98 Abies concolor
Specimen 10 of the Fritz set.
Series VI Slides made.

Ø99 Picea rubens (rubra Link)
Specimen 60 of the Fritz set.
Series VI Slides made.

Ø100 Picea engelmannii
Specimen of the Fritz set.
Series VI Slides made.

#101 Pinus Strobus
Specimen 1 of the Fritz set.
Series VI

#102 Taxodium distichum
Specimen 12 of the Fritz set.
Series VI

#103 Picea sitchensis
Specimen 20 of the Fritz set.
Series VI

#104 Pinus echinata Miller
Specimen 56 of the Fritz set.
Series VI Slides made.

#105 Picea canadensis (glauca Voss) White Spruce
Specimen 59 of the Fritz set.
Series VI Slides made.

#106 Pinus palustris
Specimen 2 of the Fritz set.
Series VI Slide made.

ϕ107 Pinus ponderosa
Specimen 22 of the Fritz set.
Series VI Slides made.

ϕ108 Sequoia gigantea
Specimen 18 of the Fritz set.

ϕ109 Libocedrus decurrens
Specimen 24 of the Fritz set.

ϕ110 Sequoia sempervirens
Specimen 16 of the Fritz set.

ϕ111 Chamaecyparis lawsoniana
Specimen 3 of the Fritz set.
~~Slides~~

ϕ112 Castanopsis chrysophylla
Specimen 14 of the Fritz set
Series VII Slides made.

ϕ113 ~~Nyssa aquatica~~ (Populus sp.)
Specimen 53 of the Fritz set.
Series VIII -3 notches Slides made

ϕ114 Ulmus crispa
Specimen 31 of the Fritz set.

ϕ115 Eucalyptus globulus
Specimen 38 of the Fritz set.
Series VII Slides made.

ϕ116 Juglans cinerea
Specimen 36 of the Fritz set.
Series ~~VIII~~ Slides made

ϕ111 Populus sp. (deltoides?)
Specimen 14 of the Fritz set.
Series VIII Slides made

ϕ118 Cornus florida
Specimen 40 of the Fritz set.
Series VII Slides made.

#119 Betula lutea
Specimen 55 of the Fritz set.
Series VIII Slides made.

#120 Gleditsia triacanthos
Specimen 42 of the Fritz set.
Series VII Slides made.

#121 Tilia americana
Specimen 51 of the Fritz set.
Series VIII –4 notches Slides made

#122 Liriodendron Tulipifera
Specimen 58 of the Fritz set.
Series VIII Slides made.

#123 Juglans nigra
Specimen 61 of the Fritz set.
Series VIII Slide made

#124 Platanus occidentalis
Specimen 32 of the Fritz set.

#125 Hicoria pecan
Specimen 33 of the Fritz set.

#126 Magnolia sp.
Specimen 41. of the Fritz set.
Series VIII ☒ Slides made

#127 Umbellularia californica
Specimen 41 of the Fritz set.

#128 Quercus borealis
Specimen 27 of the Fritz set.
Series VII ☒ Slides made.

#129 Castanea dentata
Specimen 15 of the Fritz set.
Series VII ☒ Slides made.

#130 Fraxinus americana
Specimen 28 of the Fritz set.

Ø131 Fagus grandifolia
Specimen 57 of the Fritz set.
Series VII - 3 notches Slides made.

Ø132 Arbutus menziesii
Specimen 30 of the Fritz set.
Series VII Slides made

Ø133 Diospyros virginiana
Specimen 44 of the Fritz set.
Series VII Slides made.

Ø134 Quercus alba
Specimen 62 of the Fritz set.
Series VII ← 4 notches Slides made.

Ø135 Robinia pseudacacia
Specimen 39 of the Fritz set.
Series VII Slides made

Ø136 Acer saccharum
Specimen 54 of the Fritz set.
Series VIII Slides made.

Ø137 Prunus serotina
Specimen 50 of the Fritz set.
Series VIII Slides made.

Ø138 Acer macrophyllum
Specimen 26 of the Fritz set.

Ø139 Liquidambar styraciflua
Specimen 34 of the Fritz set.
Series VIII Slides made.

Ø140 Ulmus sp. Soft Elm
Specimen 49 of the Fritz set.
Series VIII Slides made

Ø141 Platanus occidentalis
Specimen 25 of the Fritz set.
Series VIII Slides made.

Ø142 Ulmus racemosa (Rock Elm)
Specimen 48 of the Fritz set.
Series VII Slides made

Φ143 Fraxinus nigra

Specimen 37 of the Fossil set.

Series VIII ☒ 3 slides made.

Σ 144 Rhusopylon crosbyi Daugherty Miocene?

Specimen collected about 30 miles of Colorado Springs, Colo., by R.A. Crosby of 2752 Hallsdale Ave., Los Angeles, Calif.

Silicified. 3 slides made. This specimen was found to be a Rhus and very close to Rhus lamina but differing in a few minor details. (Type)

Σ 145 Acacia? or Prosopis? Pliocene?

Specimen collected by C. A. Norris at Coalinga, Calif. Silicified.

Σ 146 Juglans sp. Pleistocene of China

A charcoal fragment from "Quartz Horizon #2" in Kutzelang Cave of main deposit at Chou Kou tien. Collected by Dr Davidson Black on May 1, 1932. This fragment came from same place that Σ 63 was found. 3 slides made.

The redbud (Cercis Black's Σ 63) found in fireplace of Sinanthropus was described but this species of walnut has not been described.

Ø 147 Sorbus americana Marsh

Collected in San Jose, Calif, on 7th street near Marcose Market on June 27, 1932. The specimen is a section of the main stem of a small tree about 12 feet in height. The section was taken from the main stem at ground level. Slides made.

Σ 148 Sequoia sp. (langsdorfii?)

Three small pieces of silicified wood collected 20 miles on woody road from Kern River Bridge at Bakersfield. Col. by Herbert Anderson Kern Co. High school Bakersfield, California.
Slides made. Wood replaced by opal.
Mr. Anderson says that this specimen came from a a stump over 8 feet in diameter.

Σ 149 Sequoia Collected near Round Mountain Oil Field N.E. of Bakersfield by H. Anderson. A silicified piece of gymnosperm wood. Same as above (Σ 148)

Ø 150 Schinus molle

Specimen collected on F South 6th Street, San Jose, California, on July 20, 1932. A large branch about 4 inches in diameter.
Series VII ⊞ Slides made

Ø151 Ulmus campestris (European Elm)
Specimen from a large branch. The tree grew on the San Jose T.C. Campus and the specimen was collected on June 25, 1932.
Series VII Slides made.

Σ152 Robinia alexanderi webber Ricardo Pliocene
A silicified specimen thought to be Torylon. The microscopic structure perfect showing punctate pits and proving it to be a member of the Legumes. Slides made. This wood shows the fibres in transverse section to be of two distinct sizes - a character typical of Robinia. This wood was collected from lower Pliocene of the Mohave Desert three miles north of entrance to Last Chance Gulch. See Carnegie Inst. Publication No 412. June 1933.

Ø153 Hicoria sp.
From White Bros. Lumber Co.
Series VII Slides made.

Ø154 ~~Koa~~ Acacia koa "Koa"
Series VII White Bros San Francisco
Slides made

Ø155 Magnolia sp.
White Bros. San Francisco
Series VIII Slides made

Ø156 ~~Populus sp.~~ ~~Populus~~ Liriodendron tulipifera
White Bros. San Francisco.
Series VIII [8] Slides made

Ø157 Sophora japonica
Slide made at University of Washington by R.S. La Motte. The wood is from the collection of the University of Washington.

Ø158 Dalbergia retusa
A Panama wood in the University of Washington collection. Slide by La Motte.

Ø159 Dalbergia hupeana
A Panama wood in the University of Washington collection. Slide by R.S. La Motte.

Ø160 Cercis seleguastrum European Red Bud.
Collected in front of Library on the University of California Campus. The specimen was taken from the base of a small branch. Slides made.

Σ161 Pinus sp. (Yellow Pine Group)

A charred specimen from Custer Lake [illegible] sp. The specimen was embedded in [illegible] when slides were made it was found to show perfect microscopic structure. The material was charred by the volcanic material that covered it. The wood must be either Pinus or Picea. The wood was sent to Yale Library.

Σ162 Schilderia adamanica Daugherty ~~Cretaceous~~ Triassic
10/30/32.

Petrified wood collected near Petrified Forest of Arizona.

Cat Index 173

This wood was bought at a stand near the North gate and collected in the vicinity but outside the petrified forest. It is a ~~dicotyledonous tree~~ without vessels, or a gymnosperm with compound and uniseriate rays. Slides made The rays resemble those found in Ephedra. ~~and the wood may be a primitive member of the Gnetales.~~ Dr Bailey thinks that more material must be obtained before relationship can be determined

Σ163 Populus sp (Quaking Aspen)

This wood was about four inches in diameter and showed distinct beaver work. The wood had been replaced by chalcedony and the pointed end sawed off by the teeth of the beaver makes the wood shaped like a shell. (Slides made)

Σ164

Miocene?

This wood was found in the bottom of a wash formed by the placer mining. Petrified wood very similar in nature can be found in the gravels above the Eocene tuff at the La Porte mine. The wood was collected in September 1932 at La Porte, Plumas County, California by L.H. Daugherty

Σ165

Eocene

Fossil wood from La Porte Mine collected by Mr Mc Mahon and loaned to Miss Potbury for identification. This fossil was rather odd ~~at~~ in that the wood had been replaced by Hematite (Fe_2O_3) and Siderite ($Fe\,CO_3$). This type of petrification shows the minute structure clearly. This specimen was a small branch and was 10 c.m. in length by 3 c.m in diameter. Slides made.

Σ166 Quercus sp. (Live Oak Group)

Fossil wood collected by F.E. Matthes from Gold Spring, north of Columbia, Tuolumne County, California. This deposite was a Rhyolite locally known as "White Lead". The wood was collected on June 13, 1921. Hill N.E. of Gold Spring (North of Columbia) with small cap of andesitic gravel. White material, provably rhyolite tuff (fills deep solution cavities between residual limestone crags. Much of it has been removed by miners in search of gold. At Gold Spring fossil wood in large chunks was brought up from a shaft sunk in the white tuff. In one place the tuff includes layers of pebbles standing in vertical positions, the pebbles being turned on edge. Significance of this upturning is not clear, but slumping of material into solution caverns underneath is probably the explanation. The fossil wood is composed of Opal. This was collected when the U.S.G.S. worked on the Sonora and Big Trees Quadrangles. The slides show perfect preservation. From the size of the vessels, the type of aggregate rays and other characters one would place this close to Quercus chrysolepis.

Σ167

Silicified wood collected by the "Third Asiatic Expedition-American Museum of Natural History". Sept 1930. This wood was collected at Camp. Margett ~~Ordos~~ Manha Teds, China.

Σ168 Dicotyledon

Silicified wood from same locality as Σ167. This material was very poorly preserved and about the only microscopic structure noticable was the vessels. Slides made

Σ169

Silicified wood from same locality as Σ167.

Σ170

Silicfied wood fran same locality as Σ167.

Σ171

Fossil wood from Tung Gur Pliocene 40 mi S.E. of Oren Dabasu. Coll - C.A.E. 1930 American Museum of Natural History (Third Asiatic Expedition).

Σ172

Silicified wood with scattered bundles that appears NOT to be a palm. Locality same as Σ167. (Slides made)

THIRD ASIATIC EXPEDITION
American Museum of Natural History

Collr. Wood. No.
Hor. Dr Jin Manka Lot
Loc. Carl Thor 1st
Desc. 1930
Date

Σ173 Araucarioxylon arizonicum Triassic

Silicified wood collected in small hills just north of Adamana Arizona by Wayne Kartchner in Summer of 1932. The wood is black and shows beautiful microscopic structure. Slides made.

Ø174 Buddleia sp. (Butterfly Bush)

Collected by Carl Duncan in his yard at Palo Alto back of Stanford Dec 1, 1932.

Σ175 Quercus sp. (Live Oak) Oligocene of John Day, Oregon
Petrified wood collected at Drey's Ranch by George Beck in September 1932. Slides made Jan 5/1933.

Σ176 Platanus sp. Oligocene
Petrified wood collected at Drey's Ranch by George Beck in September 1932. Slides made

Ø177 Ephedra trifurca Torr.
This specimen was collected in the Cuyamaca Mts, San Diego County, California, by the father of R.S. La Motte. La Motte made the slide.

Ø178 Ephedra californica
This specimen was collected in the Cuyamaca Mts., San Diego County, at same time Ø177 was collected. Col=father of R.S. La Motte. Slide.

Σ179 Araucarioxylon Triassic ?

Gastrolith of a Dinosaur sent to Dr Chaney by Barnum Brown of the American Museum of Natural History. The dinosaur was not later than Lakota (Dakota) in age and the other gastroliths proved to have carboniferous fossils in them. This gastrolith proved to be a conifer with annual rings and from the transverse and tangential section appears to be either Cupressinoxylon or, more likely, Araucarioxylon. The growth rings would lead one to believe it Triassic in age. The material came from the base of the Cloverly formation, Beauvais Creek, forty miles southeast of Billings, Montana. Slides made.
The radial pitting was Araucarian and the wood resembles Araucarioxylon arizonicum.

Σ180 Quercus sp. (Live Oak) Miocene ?

Fossil log collected by Arthur Schilder at Kentucky Flat near Georgetown, California. Mr Schilder claims that woods are common in this vicinity. The placer mines underlie the volcanic material (ash) and the woods are found in the volcanic ash. The fossil shows beautiful structure and is black in color. Slides made

Σ 181 Pseudotsuga (Tapiplis?) Pleistocene or Recent?
Charcoal from a cave in the foothills of the Guadalupe Mountains of New Mexico, about fifty miles west of Carlsbad. This material was sent Dr. Chaney by Mr Edgar B. Howard of the Academy of Natural Sciences of Philadelphia. Slides made. The spirals in the tracheids are quite distinct.

Ø 182 Guajacum sanctum L. LIGNUMVITAE
Specimen donated by Allen Jacobs.

Ø 183 Arctostaphylos manzanita Manzanita
Wood donated by Jack Hensill.

Σ 184 Tertiary (Auriferous Gravel)
Wood collected at Chalk Bluffs, Nevada County, Calif. This locality is about 11 miles east of Nevada City. The wood was collected by H. J. Mac Gillivrie Sept. 1933 and he claims that it is very common where the men have been placer mining. The woods are from the auriferous gravels.

Σ 185 Fossil wood from Chalk Bluffs, Nevada County, Calif. Collected by N. F. Mac Kittrick.

Σ 186 Fossil wood from Chalk Bluffs (See 184)

Σ 187 Fossil wood from Chalk Bluffs (See Σ 184)
Slides made

Σ 188 Fossil wood from Chalk Bluffs (See Σ 184)
Slides made

Σ 189 Fossil wood from Chalk Bluffs (See Σ 184)
Slides made - Preservation Poor.

Σ 190 Fossil wood from Chalk Bluffs (See Σ 184)

Σ 191 Cretaceous Gravel
Fossil wood from Chalk Bluffs (See Σ 184).

Σ 192 Cretaceous Gravel
Fossil wood from Chalk Bluffs. (See Σ 184)

Σ 193 Cretaceous Gravel
Fossil wood from Chalk Bluffs. (See Σ 184)

Σ 194 Cretaceous Gravel
Fossil wood from Chalk Bluffs (See Σ 184)

Σ 195 Cretaceous Gravel
Fossil wood from Chalk Bluffs (See Σ 184).

Σ 196 Cretaceous Gravel
Fossil wood from Chalk Bluffs. (See Σ 184).

Σ 197 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184)

Σ 198 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 199 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 200 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 201 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 202 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 203 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 204 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 205 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 206 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 207 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 208 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 209 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 210 Auriferous Gravel
Chalk Bluffs wood. (See Σ 184).

Σ 211 Lauricotylon sp. [illegible]

Σ 212 [illegible]

Σ 213 [illegible]
Collected Sept. 1933 by Francis Kester

Σ 214 Pinus sp. (Sugar Pine Group) Pleistocene?
Another charcoal specimen from Crater Lake, Oregon. It was sent to Dr Chaney for ~~identification~~ identification. See Σ 161 for another wood from this locality.

Σ 215 ~~Williamsonia~~ Lyecopylon grigsbyi Daugherty, Triassic
Petrified ~~stem~~ stem and phloem of a cycad from the petrified forest of Arizona. The fossil was given me by Dr Camp of University of California, and was collected by a ~~guide~~ named Dick Grigsby. Wieland classified it as a Williamsonia? and I named it for Mr Grigsby. Col. in the Rio Puerco basin near Newspaper Rock; about one mile west of Rio Puerco Bridge in 1930.

Not a Williamsonia! K 4-10

Σ 216 Sambucus Pleistocene

Firewood from a cave near Clovis, N.M. This is the charcoal fragments from the fireplace of an american cave man.
See Σ 277 for more material from same fireplace. Slides made.

Σ 217 ~~Knorripteris~~ sp. Triassic

Twigs collected from the Blue Forest ~~and from St. Johns, Arizona. Col.~~ by M.S. Walker, Ranger Naturalist 1933. Mr Walker is a vertebrate paleontologist and found this Twig along with coprolites and teeth of the Phytosaur.

Σ 218 Oamunditites Chinle Triassic

Stems collected by C.L. Camp in 1926 in the Chinle, Triassic, of St. Johns, Arizona. This material was also collected with Phytosaur fragments.

Σ219 Osmundites Chinle, Triassic

Small stem that appears to be a member of the club mosses. Col. Dr C.L. Camp at St Johns, Arizona in 1926.

Σ220 Woodworthia arizonica Jeff. Triassic

Wood collected by Chas. H. Jacobs of Navajo, Ariz., This petrified wood was collected in the Black Forest. Slides made 12/28/33.

Σ221 Woodworthia arizonica Jeff. Triassic

Collected by L.H. Daugherty in the neck between the Blue Forest and the Painted Desert. Col. Sept 1933.

Σ222 Callixylon Upper Devonian

Dixon Huron Shale, ~~[illegible]~~ Ohio

state by Moses. Slides made

Ø223 Pterocarpus sp. (Angsana)
This wood is from the Fritz collection at the University of California. The wood came from the "Chiba" University Forest Japan and was collected in 1929.
Series X - ☒ Slides made

Ø224 Avicennia officinalis
Collected at "Chiba" University forest Japan and next in Fritz col.
Series IX ☒ Slides made

Ø225 Euptelea polyandra Sieb + Zucc
A member of the Trochodendraceae.
"Chiba" University Forest, Japan 1929.
Fritz Collection University of California
Series IX ☐

Ø226 Aralia elata Seem. ~~Caulis?~~ Araliaceae
"Chiba" University Forest, Japan 1929.
No 81 in Fritz Collection.
☐ - Series IX Slides made

Ø227 Eurycoma macrocarpa
Chiba University Forest, Japan 1929.
Series IX - ☒ Slides made

Ø228 Carpinus laxiflora Blume Betulaceae
"Chiba" University Forest Japan. 1927
Fritz Laboratory University of California.
Series IX

Ø229 Carpinus Tschonoskii Maximowicz
"Chiba" University Forest Japan 1929
Fritz Laboratory University of California.
Series IX - Slides made

Ø230 Poroscapus inclinatus
from Fritz Laboratory University of California. This wood was studied in Sydney.
Series X - Slide made

Ø231 Picrasma ailanthoides (Nigaki) Simaroubaceae
"Chiba" University Forest. Japan, 1927.
Series IX - Slides made

Ø232 Rhus semialata Murray (Sumac) Anacardiaceae
"Chiba" University
Series IX

Ø233 Evonymus sieboldiana Blume Celastraceae
"Chiba" University, Japan, 1927.
Series IX Slides made.

Ø234 Illicium anisatum L. (Shikimi) Magnoliaceae
"Chiba" University, Japan, 1927.
Series IX - Slides Made

Ø235 Osmanthus ilicifolius Standish Oleaceae
"Chiba" University Japan. No 105
in the Fritz collection. Series IX

Ø236 Darrydium elatum
Wood from Malay and in the
Fritz collection at the University of California.
Series X -

Ø237 Cephalotaxus drupacea Sieb. et Zucc.
"Chiba" University Forest, Japan, 1929.
Series X

Ø238 Gikilobia trifida Makino (Ginkgo) Ginkgoaceae
"Chiba" University Forest, Japan, 1929
Series IX 5 slides made

Ø239 Thujopsis dolabrata Sieb. et Zucc.
"Chiba" University Forest, Japan, 1929.
Series X 5 slides made

Ø240 Actinodaphne longifolia Nakai Lauraceae
"Chiba" University Forest, Japan, 1929.
Series IX - 3 notches

Ø241 Cinnamomum camphora Camphor Tree
Donated by Allen Jacobs.
Series IX —4 notches Slides made 4/14/34.

Ø242 Nyssa (aquatica?) Tupelo Gum
From White brothers.
Series X Slides Made.

Ø243 Dalbergia hupeana
From Anhwei, Kiangsu, Hupeh, Szechwan China. Wood donated by La Motte.
Series IX Slides made.

Ø244 Fitzroya patagonica
Donated by La Motte.
Series X Slides made

Ø245 Celtis sinensis
Donated by La Motte
notch on end
Series IX —notch on side Slides made

Ø246 Sophora japonica
Donated by La Motte.
Series IX —Two notches on end
—one notch on side
Slides made 4/14/34.

Ø247 Araucaria cunninghamii
Specimen from Forestry Commission of New South Wales. Sydney, Australia.
Series # X ☒ ☒ Slides made

Ø248 Dillenia luzoniensis (Vid) Merr. Phillippines
Fritz Col. # 17598 B.F.
Series XI ☐ Slides made

Ø249 Agathis alba (Lam) Foxes
Fritz Col. # 292
Series XI ☐

Ø250 Pithecolobium acutiferum Benth
Fritz Col. 400
Series XI ☒ Slides made

Ø251 Zizyphus talaria Merr.
Fritz col. 17528 BF
Series XI ☒ Slides mad

Ø252 Michelea compressa Max
Fritz Col. 28
Series XI ☒ Slides made

Ø253 Cryptocarya sp.
Fritz Col. 23605 BF
Series XI ☐ Slides made

Ø254 Grewia stylocarpa Wall
Fritz Col. 17589 BF
Series XI Slides made

Ø255 Cryptocarya chinensis
Fritz col. 32
Series XI Slides made

Ø256 Tetrastigma japonica Thunb.
Fritz Col. 48
Series XI Slides made

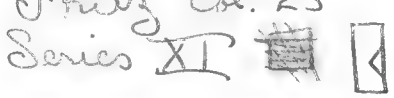
Ø257 Keteleeria davidiana Beis.
Fritz col. 7
Series XI Slides made

Ø258 Terminalia calappa L.
Fritz col. 49
Series XI Slides made

Ø259 Lagerstroemia subcostata Koehne.
Fritz Col. 48
Series XI Slides made

Ø260 Heleeia formosana Himel
Fritz Col. 25
Series XI Slides made

Ø261 Machilus kusanoi Hayata
Fritz Col. 33
Series XI Slides made.

Ø262 Diplospora viridiflora D.C.
Fritz Col. 25
Series XI  Slides made

Ø263 Engelhardtia formosana Hayata
Fritz Col. #16
Series XI, Slides made

Ø264 Symplocos cochinchinensis (Lour.) Moore
Fritz Col. #22
Series XI Slides made

Ø265 Meliosma rhoifolia
Fritz Col. #44
Series XI

Ø266 Pterospermum rubiginosum
Fritz Col 2677
Series XI

Ø267 Cordia sp. (grandis?) Cuba
Fritz Col. #22
Series XI

Σ 268 Auriferous Gravel

Sent in by Prof Fritz. This wood came from a hydrolic tailing heap near Camino in El Dorado County, California. Slides made.

Σ 269 Sequoia langsdorfii Tertiary of Washington State

Wood collected at Vantage point on bank of Columbia River by Bob La Motte. This is one of Becks localities. Slides made

Σ 270 Ulmus sp. Columbia Lava - Washington

Collected by La Motte at Vantage point #1 on the Columbia. This is one of Beck's localities. Slides made.

Σ 271 Pinus sp. San Pablo - Upper Miocene

Collected near Kirker Pass about 3000 feet from one of D. Chaney localities. Slides made.

Σ 272 Vine? Eocene

Fossil vine from La Porte Mine. Collected by L.H.D. in 1932. LaPort, Plumas County, Calif. Slides show but little structure.

Σ 273 Schilderia adamanica Dty Triassic (Chinle)

Small stem with pith. Bought from store in forest near Museum. Slides made.

Σ274 Sequoia Horsetown (Cretaceous)

Wood collected at Redding, California, by C. Durrell. This petrified wood was given to me March 27, 1934 by Miss Oliver. 3 slides made

Σ275 Horsetown (Cretaceous)

Possibly same wood as above. It was collected by C. Durrell at the same time.

Σ276 Sequoia Knoxville (Cretaceous) ~~Jurassic~~

Petrified wood collected by C. Durrell near Redding, California. 3 slides made.

Σ277 Sapindus ~~Williamsonii~~ Pleistocene ~~fireplace~~

Collected from a cave at Clovis, New Mexico - a charred fragment of wood from a fireplace. 3 slides made. This resembles the modern "Western Soapberry" Sapindus drummondii nearer than any other member of the genus.

Σ278 Salix ??? Cretaceous Gravels

Collected by Chas. Reid.

One slide of Radial section made.

Σ279 Callipylon Devonian?

Silicified wood collected at Sinking Springs, Highland County, Ohio. Radial section made.

Σ280 Eocene?

Fossil wood collected by Earl Turner in the Cottage Grove Quad., Oregon 1½ mi. S.E. of Spencers Butte on Christofferson Ranch. [33-8 - S.E¼, Sec 29 T. 18 S. R 3 W.]

Σ281

Fossil wood collected by Earl Turner 33-3 NE¼ sec 15, T. 18 S. R. 3W on 550' contour or slightly above. Eugene Quad. 2 mi + South of Springfield Junction.

Σ282

Fossil wood collected by Dr Earl Turner 33-28. 4.9 miles west of settlement of Royal on Cottage Grove-Lorane Road. Found in tuff underlying basal conglomerate of Fisher Formation. Cottage Grove Quadrangle.

Σ283 Eocene

Fossil wood collected by Dr Earl Turner ¼ mile up Steele Creek from East Fork of the Coquille River on Abernathy Ranch near Dora, Oregon. A marine formation. [A 1286]

Lower Loaldo Formation

Σ 284 Collected by Dr Earl Turner ten feet east of the east wall of Squaw Island off Sunset Bay on the lower portion of the Loaldo Formation. [LA-707]

Σ 285 White River Tertiary (Arckaree?)
Wood collected by Dr Chaney North East of Akron, Colorado.

Σ 286 Collected by sombody somewhere near Langille, Oregon. Two small fragments of wood given to me by Dr Chaney on Tuesday April 10, 1934.

Σ 287 ~~Ginkgo~~ sp. Columbia Lava
Wood collected by Beck near Ellensburg Washington. This is typical Ginkgo wood. 5 Slides made.

Σ 288 Cupressinoxylon sp. San Pablo Miocene
Wood collected by Paul Gerhart on Coral Hollow near Western Pacific Gravel Pit at Tracey Calif. 5 Slides made.

Σ ϕ289 Ficus caraca L. Edible Fig. (Europe)

Collected by L H Daugherty near campus on E San Carlos Street. [3rd and San Carlos] A very fine fig was cut down to build a Gas Station. The sample was sap wood from a place on the main trunk about 4 feet above ground. Wood col. on May 3, 1934. Slides made.

Σ 290 Chaneyi Eocene (Auriferous Gravel)

Collected by Ralph W Chaney on May 11, 1934 in the U-Bet mine near Red Dog, California. This is near Grass Valley, California. Slides made. This wood is to be named in honor of Dr Chaney because it was due to the fact he got on the wrong road that the wood was discovered. He insists we were the cause of him getting lost but the fact remains he was lost. Slides made

Σ 291 [redacted] Eocene (Auriferous Gravel)

Collected by L H Daugherty. Embedded in gravel where hydralic mine "U-bet" was being worked. Locality same as Σ 290. Slides made.

Σ 292 Eocene? (Auriferous Gravel)
Wood collected by L H Daugherty at
Le-Bet Mine near Grass Valley.
Slides made

Σ 293 Eocene? (Auriferous Gravel)
Wood collected by L H Daugherty at
Le-Bet Mine near Grass Valley, California.
Slides made.

Σ 294 Eocene? (Auriferous Gravel)
Wood collected by L H Daugherty
at Le-Bet mine near Grass Valley, Calif.
Slides made.

Σ 295 Ginkgo sp. Columbia Lava of Washington
Wood collected by Mobery of
Scripps Institute. This wood is
from same locality as woods collected
by Becker. (Rocks Vantage)

Ø296 Ilex opaca Aiton Holly.
Wood furnished by Jack Hensel.
This was from a small Holly tree growing near Associated filling station on North First street, San Jose, Calif. Slides by Tom Mersman

Ø297 Caesalpinia platyloba Wats (Quebracha)

Ø298 Tabebuia pentaphylla (L) Hemsl.

Ø299 Cedrela sp.

Ø300 Sterculia or Arachis hypogaea L

Ø301 Cassia biflora L ?

Ø302 Vaccinium leucanthum Schl. ?

Ø303 Bauhinia or Eugenia

Ø304 Cedrela mexicana Roem.

Ø305 Prunus capuli (Capulin)

Ø306 Enterolobium cyclocarpum Parota

Ø307 Swietenia { cirrhata or macrophylla } Blake

Ø308 Enterolobium cyclocarpum

Amerimnon granadillo Standl. (Dalbergia)

Ø309 ~~Pithecollobium multiflorum~~

Ø310 Gliricidia sepium (Jacq) Stend ?

Ø311 Hymenaea courbaril L.

Ø312 Swietenia sp.

Ø313 Enterolobium cyclocarpum

Ø314 Talauma mexicana (D.C.) Don. ?

Ø315 Pterocarpus acapulcensis Rose.

Ø316 Arachis hypogaea or Sterculia apetala

Ø 317 Cassalpina sp ?

Ø 318 Ficus sp

Ø 319 Leucaena sp.

Ø320 ~~Lonchocarpus sp~~. Acacia sp ?

Ø 321 Agonandra racemosa (DC.) St.

Ø 322 Hura polyandra Baill.

Ø 323 Pterocarpus acapulcensis (Drago)

Ø324 Heliocarpus or Guazuma sp

Ø325 Duranta sp. ?

Ø326 Miconia argentia

Ø327 Cordia ~~sp~~. elaeagnoides D.C.

Ø328 Ehretia or Citharexylum

Ø329 Tamarindus indicus L.

Ø330 Cordia alba ?

Ø 331 Ichthyomethia americana (Machaerium) Alejo

Ø 332 Psidium guajava L.

Ø 333 Miconia (albicans?) (Swartz) Triana "Maria Blanco"

Ø 334 Jatropha sp. ?

Ø 335 Castronium graveolens Jacq.

Ø 336 Byrsonima crassifolia (L.) D.C.

Ø 337 Montanoa sp. Paracua

Ø 337 Pithecollobium arboreum (L) Urban

Ø338 Astrocasia (Croton) or Montanoa or Gochnatia

Ø339 Euxylophora paraensis Hub. Rutaceae
Collected by Ynes Mexia (No 6033) State of Para, Brazil, District Acaria. Dense forest alt 50 m. Tree said to be 50 m. high. Series #15 ☐
Slides inside

Σ340 Arnsperous Gravel
From Chalk Bluffs - North End.
Collected by "mac".

Σ341 Schilderia adamanica Dty. Triassic of Arizona
This specimen came from the black forest and showed branching. The specimen was obtained to show the structure of the primary xylem and medulla.

Σ342 ~~Moraxites~~ ~~Paraonus~~ sp Tempskya sp. Shinarump(?) ~~Moenkopi - Trassic~~
Col. by S.F. Brady, Museum of N. Arizona.
Col from Shinarump near ~~Holbrook~~ Gallup N.M.
Tempskya has only been found in the Lower Cretaceous ~~but~~ and it might be possible that the Shinarump specimen was collected in Cretaceous rather than Shinarump. The fossil was represented by a stem fragment showing numerous adventitious roots.

Σ 343 Cyperus sp. Pliocene of Nebraska

A monocot stem collected by R.A. Stirton in Nebraska at his Little Beaver Locality B. Slides made. A monocot with aerenchyma and a closed bundle. ~~similar to corn~~. Slides made

Σ 344 Araucarioxylon arizonicum Triassic of Arizona

Unaltered wood from center of a petrified log. This wood contained droplets of resin and shows the pitting in the crossing field. Sent in by Museum of Northern Arizona. Slides made 8/1/34.

Σ 345 Eophyton (?) Upper Silurian

Small bits of ~~fluted~~ ribbed stem-like structures from Chas. Merriam's locality 67. The structure appears to be branching tube like ~~structures~~ cells similar to that of the algae. The material was collected by Carlton Condit. (Note - see Dimorphosiphon Fr/eg [Edward-Plant Life Through the Ages p. 107] Nägeli, O (1927) Dimorphosiphon [illegible] on a new Cyclosorus from [illegible]

Ø 346 Actinodaphne ~~langi folia~~ ~~Nakai~~ lancifolia Meisen. Japan.

Lauraceae

Chiba University Forest Japan

Fritz Collection # 37.

Series # 15 ☐ . Slides made

Ø347 Daphniphyllum Teysmanni Kurz Japan
Euphorbiaceae. Chiba Forest. Fritz Col. 60
Series #15 [1] 5 slides made

Ø348 Eurya japonica Thunb Japan
Fam. – Theaceae Chiba Forest - Fritz Col. 81
Series #15 [2] 5 slides made

Ø349 Benzoin ~~glaucum~~ umbellatum Sieb et Zucc Japan
Lauraceae Chiba Forest Fritz Col. 41
Series #15 [3] 5 slides made.

Ø350 Diospyros lotus Japan
Fam Ebenaceae Chiba Forest Fritz Col. 100
Series #15 [4] 5 slides made

Ø351 Melia japonica G. Don. Japan (Planted)
Fam. Meliaceae – Chiba Forest – Fritz Col. 58
Series #15 [5] 5 slides made

Ø352 Viburnum Awabucki K. Koch Japan
Fam. Caprifoliaceae - Chiba Forest - Fritz Col. 109
Series #15 [6] 5 slides made.

Ø353 Ternstroemia Mokof Nakai Japan
Fam. Theaceae - Chiba University Forest - Fritz Col. 83
Series #15 [7] 5 slides made.

Ø354 Idesia polycarpa Maxim Japan
Fam- Flacourtiaceae- Chiba Univ. Forest- Fritz Col. 84
Series #15 [X] Slides made

Ø355 Stachyurus praecox Seib. et Zucc Japan
Fam- Stachyuraceae· Chiba U. Forest- Fritz col. #85
Series #15 [X] Slides made

Ø356 Diervilla hortensis Sieb. et Zucc. Japan
Fam. Caprifoliaceae· Chiba U Forest- Fritz Col. #107
Series #15 [X] Slides made

Ø357 Clerodendron trichotomum Thunb. Japan
Fam Verbenaceae - Chiba U Forest- Fritz Col. #106
Series #15 [X] Slides made.

Ø358 Elaeagnus longipes A. Gray Japan
Fam. Elaeagnaceae- Chiba U. Forest Fritz Col. #86
Series #15 [1] Slides made.

Ø359 Styrax japonicum Seib et Zucc. Japan
Fam. Styracaceae· Chiba U. Forest· Fritz Col 102
Series #15 [4] Slides made

Ø360 Aucuba japonica Thunb. Japan
Fam. Cornaceae Chiba U Forest· Fritz Col. 89
Series #15 [II] Slides made

Ø 361 Camellia japonica (L) Makino Japan
Fam. Theaceae - Chiba U. Forest - Fritz Col. # 80
Series # 15 Slides made

Ø 362 Deutzia crenata Sieb et Zucc Japan
Fam Saxifragaceae - Chiba U Forest - Fritz col #44
Series # 15 Slides made

Ø 363 Benzoin ~~glaucum~~ glaucum Sieb et Zucc. Japan
Syn. Lindera glauca Blume
Fam Lauraceae - Chiba U Forest - Fritz Col. # 40
Series # 15 Slides made

Ø 364 Rhododendron Kaempferi Planch. Japan
Fam. Ericaceae - Chiba U. Forest - Fritz Col # 96
Series # 15 One notch on side. One corner. Slides made

Ø 365 Rapanea neriifolia Mez Japan
Fam. Myrsinaceae - Chiba U. Forest - Fritz Col # 98
Series # 15 Slides made

Ø 366 Eurya Ochnacea Szyzg. Japan
Fam. Theaceae Chiba U. Forest - Fritz Col. # 82
Series # 15 Slides made

Ø 367 Fagara ailanthoides Engl. Japan
Fam. Rutaceae - Chiba U. Forest - Fritz Col # 54
Series # 15 - 1 corner Slides made.
2 notches

Ø368 Xanthoxylum piperitum DC. Japan
Fam. Rutaceae Chiba U. Forest - Fritz Col. # 56
Series # 15 Slides made.

Ø369 Maackia amurensis Rupr. et Maxim Japan
Fam. Leguminosae - Chiba U. Forest - Fritz col 53
Series # 15 Slide made

Ø370 Albizzia Julibrissin Durazz. Japan
Fam Leguminosae - Chiba U. Forest - Fritz col 52
Series # 15 Slides made

Ø371 Aleurites cordata Steud. Japan
Fam Euphorbiaceae - Chiba U. Forest - Fritz Col. 59
Series # 15 Slides made

Ø372 Orixa japonica Thunb. Japan
Fam. Rutaceae - Chiba University Forest - Fritz Col #55
Series # 15 Slides made

Ø373 Cynoxylon japonica Nakai Japan
Fam. Cornaceae - Chiba University Forest - Fritz # 92
Series # 15 Slides made

Ø374a Pieris japonica D. Don Japan
Fam. Ericaceae - Chiba U. Forest - Fritz # 95
Series # 15 Slides made

Ø374-b Pourthiaea coreana Nemo Japan
Fam - Rosaceae Chiba U. Forest - Fritz # 47
Series #15 Slides made.

Ø375 Myrica rubra Sieb. et Zucc. Japan
Fam. Myricaceae — Chiba University Forest - Fritz # 14
Series #16 ☐ Slides made.

Ø376-a Broussonetia Kazinoki Sieb. Japan
Fam. Moraceae - Chiba University Forest - Fritz # 29
Series #16 ☐ Slides made

Ø376-b Ficus erecta Thunb. Japan
Fam. Moraceae - Chiba U. Forest - Fritz # 30
Series #16 ☐ Slide made

Ø377 Sapium japonicum Pax. et K. Hoffm. Japan
Fam. Euphorbiaceae - Chiba U. Forest - Fritz #62
Series #16 ☒

Ø378 Euscaphis japonica Pax. Japan
Fam - Staphyleaceae - Chiba U. Forest - Fritz # 71
Series #16 ☒

Ø379 Mallotus japonicus Muell. Arg. Japan
Fam. Euphorbiaceae - Chiba U. Forest - Fritz # 61
Series #16 ☐

Ø380 Pittosporum tobira Ait. Japan
Fam. Pittosporaceae – Chiba U. Forest – Fritz Col. # 45
Series #16

Ø381 Neolitsea Sieboldii Nakai Japan
~~Syn.~~ (Syn. Tetradenia glauca Matsum)
Fam. Lauraceae – Chiba U. Forest – Fritz Col #43
Series #16

Ø382 Cornus controversa Hemsl. Japan
Fam. Cornaceae – Chiba U. Forest – Fritz Col # ~~391~~
Series #16

Ø383 Machilus Thunbergii Sieb. et Zucc. Japan
Fam. Lauraceae – Chiba U. Forest – Fritz Col # 42
Series #16

Ø384 Callicarpa japonica Thunb. Japan
Fam. Verbenaceae – Chiba U. Forest – Fritz Col. # 115
Series #16

Ø385 Lagerstroemia indica L. Japan ? Planted
Fam. Lythraceae – Chiba U. Forest – Fritz Col # 113
Series #16 ← 3 notches 6 slides made.

Ø386 Symplocos prunifolia Sieb. et Zucc Japan
Syn.: Bobua prunifolia
Fam. Symplocaceae – Chiba U. Forest – Fritz Col. # 101
Series #16 ← 4 notches

Ø387 Xolisma elliptica Nakai Japan
Fam. Ericaceae - Chiba U. Forest - Fritz Col. # 94
Series #16 ← one corner ← one notch Slides made

Ø388 Micromeles alnifolia Koehne. Japan
Fam Rosaceae - Chiba U. Forest - Fritz Col # 46
Series #16 ← 2 corners ← 1 notch

Ø389 Ligustrum kiyozumianum Blume Japan
Fam. Oleaceae - Chiba U. Forest - Fritz Col. # 104
Series #16 — 4 corners — 1 notch Slides made.

Ø390 Meliosma myriantha Sieb et Zucc. Japan
Fam. Sabiaceae - Chiba U. Forest - Fritz Col. # 78
Series #16 — 1 notch — 1 notch

Ø391 Clethra barbinerbis Sieb. et Zucc. Japan
Fam. Clethraceae - Chiba U. Forest - Fritz Col # 93
Series #16 — 2 notches — 1 notch

Ø392 Zelkowa serrata Makino Japan
Fam. Ulmaceae Chiba U. Forest - Fritz Col. # 28
Series #16

Ø393 Sapindus Mukorossi Gaertn. Jap
Fam Sapindaceae Chiba U. Forest - Fritz Col. 77
Series #16 5 slides made

Σ 394 Umbellularia Miocene

From Locality 204, Oakvale Mine, Nevada Co., California. Petrified wood formed with leaves of Willow, Populus etc. Slide Made.

Σ 395 Hicoria sp. Miocene

Pit River woods collected by La Motte Slides made. Locality - Pit River Modoc Co. Calif. U.C. Museum Paleobotanical locality 115

Σ 396 Lithocarpus sp. Miocene

Pit River wood collected by La Motte Slides made. Modoc Co. Calif. U.C. Museum Paleobotanical locality #115

Σ 397 Ptelea sp. Miocene

Pit River wood collected by Robt. La Motte Slides made. Modoc Co. Calif. U.C Museum Paleobotanical locality #115

Σ 398 Laurinoxylon sp Eocene

This wood is from the Eocene at Locality 108 of Dr Chaney. Wood resembling this and possibly the same species common at Chalk Bluffs.

Σ 399 Cupressinoxylon (dawsoni?) Eocene

Fossil wood from road above school house near locality 3020. Collected by RS La Motte For a description of this species see Berry Prof. Paper 92. Also Penhallow – N.A. Gymnosperms.

Σ400 Pityoxylon sp. Eocene

In describing this wood look up a description by Knowlton. The wood was collected by La Motte, and belongs to the Steel's Crossing Puget flora. ½ Mile NW of Renton.

Σ401 Fraxinus sp Pliocene

Wood collected by Chas Read at Clarendon, Texas. The wood is a small piece of petrified root or at least near the base of the tree and will be very difficult to identify. The specimen came from the Shannon Ranch. Slides Made.

Σ402 Protocedroxylon sp. Jurassic ?

Wood from the Petrified forest of Medora, N. D. This is in the Bad Lands of North Dekota.

Σ403 Hamamelis Pliocene

This wood was collected in Nebraska Pliocene and shows perfect preservation. Dr Chaney is working on the leaves from the locality and Stewarton is working on Mammals. The slide was marked "D" by the student that ground the slides.

Σ404 Platanus Pliocene

This ~~wood~~ came from same locality ~~of~~ Pliocene in Nebraska as that of "Σ403" The preservation is very poor. Marked "E"

Σ405 Populus Pliocene

This wood came from same locality as that of "Σ403". Marked "C".

Σ406 Platanus Pliocene

From Nebraska in same locality as that of "Σ403". Slides made - marked "B"

Σ407 Platanus Pliocene

From Nebraska in same locality as that of "Σ403". Slides made - preservation good - marked "A".

Σ408 Shinarump-Triassic??

This is a small piece of dicotyledonous wood sent in by Major L.F. Brady. The age is possibly Cretaceous or Eocene. There is no rings and numerous rays which makes the wood resemble some of the Chalk Bluff woods. If Major Brady is correct and it really came from Shinarump either a part of the Shinarump is younger than Triassic or (less likely) this is the oldest known broad leaf tree.

Σ 409 Cupressus sp. Esmeralda - Miocene

Petrified wood sent in by Harry E. Wheeler of the University of Nevada. This was a "gold bearing" wood from Nugger Wells, Churchill County, Nevada. Nov. 18, 1935. Slides returned to Mr. Wheeler.

Σ 410 Chinle - Triassic

Fern collected by L W Daugherty in ~~July~~ August 1933. Locality #1 in new road cut near Tepees in the Petrified Forest National Monument, Holbrook Arizona.

Σ 411 Morrison

Fossil wood from Escalente, Utah. Collected by L W Daugherty on

Σ 412 Morrison

This locality is same as above it is about 1 mile from Escalente Utah in small hills to left of road going toward Escalente. Stream of water to be crossed just after getting off road. This locality was pointed out by Cope, a ranger naturalist at Bryce Canyon.

Σ 413 Morrison?

Fossil wood same locality as above

Σ 414 Morrison?

Same as Σ 412

Σ 415 Cretaceous or Eocene

Wood collected at Mc Murtreys Ranch 6 8/10 miles South of McLean Texas. This wood was found embedded in a conglomerate that lies unconformably on red beds believed to be the Dockum Triassic. These conglomerates contain Lower cretaceous shells and must be either Cretaceous or Eocene. The wood was collected by L H Daugherty on August 15, 1935.

Σ 416 Cretaceous or Eocene

Wood collected across road from Mc Murtreys Ranch in same conglomerate as above. The Shells were Exogyra Texana and Dryphaea Tucumcari and both wood and shells were found embedded.

Σ 417 Cretaceous or Eocene

Same locality as Σ 415. Fossil wood

Σ 418 Fossil wood from locality same as Σ 415.

Σ 419 Chinle-Triassic

Fossil wood collected by Mrs W.L. Crawford from Zion Canyon. This locality is about a mile from the gate and Mrs Crowford has a stand ~~Σ 420~~ and sells wood and post cards at this point. The wood was obtained June 15, 1935.

Σ 420 Chinle Triassic

Fossil wood same locality as Σ 419

Σ 421 Chinle-Triassic

Fossil wood from same locality as Σ 419.

Σ 422 Cretaceous or Eocene

Fossil wood. Same locality as Σ 415.

Σ 423 Cretaceous or Eocene

Fossil wood Same locality as Σ 415.

Σ 424 Cretaceous or Eocene

Fossil wood. Same locality as Σ 415

Σ 425 Cretaceous or Eocene

Fossil wood collected at Mc Murtreys ranch 6 8/10 miles South of Mc Lean, Texas. Collected by L H Daugherty August 15, 1935

Σ 426 Cretaceous or Eocene

Fossil wood collected at same locality as above in Σ 425.

Σ 427 Chinle - Triassic

Wood collected at Marble Canyon along Echo Cliffs near Navajo Bridge This is near highway 89.

Σ 428 Chinle - Triassic

Wood collected at same locality as Σ 427.

Σ 429 Chinle - Triassic

Wood collected with Σ 427.

Σ 430 Araucarioxylon Chinle - Triassic

Collected along "Neck" in Petrified Forest (Holbrook, Arizona) July 1935. by L. H. Daugherty

Σ 431 Chinle-Triassic

Wood collected near Moa Rue, Arizona in the Little Colorado Valley north of Flagstaff This wood was collected by L W Daugherty on along US highway 89.

Σ 432 Chinle-Triassic

Wood collected at same time and place as Σ 431.

Σ 433 Chinle-Triassic

Wood collected at same time and place as Σ 431.

Σ 434 Chinle-Triassic

Wood collected at same time and place as Σ 431. These small fragments covered the ground as far as one could see — They looked like gravel!

Σ 435 Cretaceous or Eocene

Wood collected August 15, 1935 by L W Daugherty locality same as Σ 406.

Σ436 Cretaceous or Eocene
Fossil wood same locality and time as Σ435 + Σ416.

Σ437 Cretaceous or Eocene
Ditto

Σ438 Cretaceous or Eocene
Ditto

Σ439 Cretaceous or Eocene
Ditto

Σ440 Cretaceous or Eocene
Ditto

Σ441 Cretaceous or Eocene
Ditto

Σ442 Cretaceous or Eocene
Fossil Wood collected same locality and time as Σ415,

Σ 443 Cretaceous or Eocene

Ditto

Σ 444 Cretaceous or Eocene

Ditto

Σ 445 Cretaceous or Eocene

Ditto

Σ 446 Coprolites Dockum - Triassic

Collected by Mateer at Palo Duro Canyon (Canyon, Texas). This locality can be seen about half way down canyon wall at point the highway enters Canyon.

Σ 447 Cretaceous or Eocene

Fossil wood. Same time; same locality as Σ 416.

Σ 448 Cretaceous or Eocene

Fossil wood. Same time; same locality as Σ 416.

Σ 449 Cretaceous or Eocene

Fossil wood. Same time same locality as Σ 415.

Σ 450 Cretaceous or Eocene

Fossil wood; same time, same locality as Σ 416.

Σ 451 Cretaceous or Eocene

Fossil wood; same time, same locality as Σ 416

Σ 452 Cretaceous or Eocene

Fossil wood; same time, same locality as Σ 416.

Σ 453 Permian (Abo sandstone)

Collected in Abo Sandstone on Rio Puerco Mesa 3 miles from Coyote, New Mexico July 20, 1935 by L. H. Daugherty. These peculiar stem-like structures are found weathering out of the Abo — they are very common. The fact that they are found upright makes me feel they are some kind of a stem.

Σ 454 Poleo as:- Triassic

Fossil wood replaced by iron. From Poleo sandstone capping Rio Puerco Mesa 3 miles from Coyote, New Mexico. July 20, 1935

Σ 455

Fossil wood. Same locality, same time as Σ 416.

Σ 456 Araucarioxylon Chinle - Triassic

Collected July 1935 in "Neck" at Petrified Forest National Monument by L. W. Daugherty

Σ 457 Dockum-Triassic (Reworked)

This material was collected by Dr Olson at Turner Ranch July 30, 1935. Turner's ranch is 3½ miles south of Alvord, Texas.

Σ 458 Cretaceous or Eocene

Wood. Same locality, same time as Σ 415.

Σ 459 Cretaceous or Eocene

Wood. Same locality; same time as Σ 415.

Σ 460 Otozamites Chinle - Triassic

Locality at Nazlini just back of grocery store. These fossils collected by Sam Welles in 1934.

Σ461 Otozamite — Chinle-Triassic
See Σ460.

Σ462 — Chinle-Triassic
See Σ460

Σ463 — Chinle-Triassic
See Σ460

Σ464 Otozamites — Chinle-Triassic
See Σ460

Σ465 Otozamites — Chinle-Triassic
See Σ460

Σ466 Otozamites — Chinle-Triassic
See Σ460

Σ467 Otozamites — Chinle-Triassic
See Σ460

Σ468 Otozamites Chinle-Triassic
See Σ460

Σ469 Otozamites Chinle-Triassic
See Σ460

Σ470 Otozamites Chinle-Triassic
See Σ460 (Same as Σ467)

Σ471 Chinle-Triassic

Collected by M.V. Walker at Petrified Forest National Monument, Holbrook, Arizona. This plant locality I is near the Tepees along the new road. When the highway was built this fossil leaf locality was discovered. At the base of the cut the leaves are mainly cycads but about 20 feet higher they are mainly composed of ferns. Walker has collected from this locality for some time as the place was discovered in 1931. I collected here in 1932 & 1935.

Σ472 Laccopteris Chinle-Triassic
See Σ471.

Σ473 (See Σ471.) Chinle-Triassic

Σ474 (See Σ471) Chinle-Triassic

Σ475 Laccopteris (See Σ471) Chinle-Triassic

Σ476 Laccopteris (See Σ471) Chinle-Triassic

Σ477 Laccopteris (See Σ471) Chinle-Triassic

Σ478 Laccopteris (See Σ471) Chinle-Triassic

Σ479 (See Σ471) Chinle-Triassic

Σ480 See Σ471 Chinle-Triassic

Σ 481 Laccopteris (See Σ 471) Chinle - Triassic

Σ 482 (See Σ 471) Chinle - Triassic

Σ 483 (See Σ 471) Chinle - Triassic

Σ 484 Laccopteris (See Σ 471) Chinle - Triassic

Σ 485 Clathropteris (See Σ 471) Chinle - Triassic

Σ 486 (See Σ 471) Chinle - Triassic

Σ 487 (See Σ 471) Chinle - Triassic

Σ 488	(See 471)	Chinle-Triassic
Σ 489	(See 471)	Chinle-Triassic
Σ 490	Laccopteris (See 471)	Chinle-Triassic
Σ 491	Laccopteris (See 471)	Chinle-Triassic
Σ 492	(See 471)	Chinle-Triassic
Σ 493	Laccopteris (See 471)	Chinle-Triassic
Σ 494	Laccopteris (See 471)	Chinle-Triassic
Σ 495	Laccopteris and	Chinle-Triassic

Σ496 Chinle-Triassic

(See Σ471)

Σ497 Otozamites Chinle-Triassic
(See Σ471)

Σ498 Neocalamites Chinle-Triassic

This is from locality #2. This leaf bed consists of leaves and branches of Neocalamites and some cycad leaves. The locality was discovered by Walker in 1936 when we were looking for small stems. The locality is only about 200 yards from the locality described in

(For locality see Σ471)

Σ499 Chinle Triassic

(See Σ471)

Σ500 Clathropteris Chinle-Triassic
(See Σ471)

Σ501 Chinle Triassic

See Σ471

Σ 502	Laccopteris (See Σ 471)	Chinle - Triassic
Σ 503	Laccopteris (See Σ 471)	Chinle - Triassic
Σ 504	Laccopteris (See Σ 471)	Chinle - Triassic
Σ 505	Clathropteris (See Σ 471)	Chinle - Triassic
Σ 506	Laccopteris (See Σ 471)	Chinle - Triassic
Σ 507	Laccopteris (See Σ 471)	Chinle - Triassic
Σ 508	(See Σ 471)	Chinle - Triassic

Σ 509 Laccopteris
Clathropteris
Cladophlebis ?
(See Σ 471)
Chinle-Triassic

Σ 510 Odontopteris?
(See Σ 471)
Chinle-Triassic

Σ 511
(See Σ 471)
Chinle-Triassic

Σ 512 Laccopteris
(See Σ 471)
Chinle-Triassic

Σ 513 Laccopteris
(See Σ 471)
Chinle-Triassic

Σ 514
(See Σ 471)
Chinle-Triassic

Σ 515
(See Σ 471)
Chinle-Triassic

Σ 516 Clathropteris
(See Σ 471)
Chinle-Triassic

Σ517 Clathropteris (See Σ471) — Chinle-Triassic

Σ518 Laccopteris (See Σ471) — Chinle-Triassic

Σ519 Cladophlebis (See Σ471) — Chinle-Triassic

Σ520 Odontopteris (See Σ471) — Chinle-Triassic

Σ521 (See Σ471) — Chinle-Triassic

Σ522 (See Σ471) — Chinle-Triassic

Σ523 Laccopteris (See Σ471) — Chinle-Triassic

Σ524 Odontopteris (See Σ471) — Chinle-Triassic

→ Σ525 — Chinle-Triassic

Σ526	Lacoopteris (See Σ471)	Chinle-Triassic
Σ527	(See Σ471)	Chinle-Triassic
Σ528	(See Σ471)	Chinle-Triassic
Σ529	Lacoopteris (See Σ471)	Chinle-Triassic
Σ530	(See Σ471)	Chinle-Triassic
Σ531	(See Σ471)	Chinle-Triassic
Σ532	(See Σ471)	Chinle-Triassic
Σ533	(See Σ471)	Chinle-Triassic
Σ534	Lacoopteris (See Σ471)	Chinle-Triassic

Σ 535 — Chinle-Triassic
(See Σ 471)

Σ 536 — Chinle-Triassic
(See Σ 471)

Σ 537 — Chinle-Triassic
(See Σ 471

Σ 538 — Chinle-Triassic
(See Σ 471)

Σ 539 Laccopteris — Chinle – Triassic
(See Σ 471)

Σ 540. — Shinarump-Triassic
Collected at Wilsons Ranch near Las Vegas Nevada. This wood is probably Araucarioxylon? June 14, 1935 Col. L.N. Daugherty

Σ 541 [redacted] — Shinarump-Triassic
(See Σ 540)

Σ 542 Conglomerate Sample — Shinarump Triassic

Σ 543

Σ 544 Laccopteris Chinle-Triassic
(See Σ 471)

Σ 545 (Dakota ?)
Leaves collected at Escalente, Utah near Bryce Canyon. Collected with Mr Cope and Les Wilson in a formation just above Morrison and below a sandstone believed to be Dakota in age. See Note Book for further details (See Σ 412).

Σ 546 (Dakota ?)
(See Σ 545 & Σ 412)

Σ 547 Chinle - Triassic
(See Σ 471)

Σ 548 Laccopteris Chinle - Triassic
(See Σ 471)

Σ 549 Conglomerate Shinarump
Collected at Wilson Ranch on June 14, 1935.
This ranch is near Las Vages, Nevada. (See Notes)

Σ 550 — Chinle - Triassic

(See Σ471)

Σ 551 — Chinle - Triassic

Stozamite

(See Σ471)

Σ 552 — Chinle Triassic

(See Σ471)

Σ 553 — Chinle-Triassic

(See Σ471)

Σ 554 — Chinle - Triassic

(See Σ471)

Σ 555 — Chinle - Triassic

(See Σ471)

Σ 556 — Permian ? or Triassic ?

Fossil wood collected on Western slope of Hueco Mts, El Paso County, Texas. Diameter of stumps 45 to 50 inches. There is a limestone and the stumps are on an old soil and are upright and in place.

Σ557 Lacoptris — Chinle-Triassic
(See Σ471)

Σ558 Lacoptris — Chinle-Triassic
(See Σ471)

Σ559 Lacoptris — Chinle-Triassic
(See Σ471)

Σ560

Σ561 Lacoptris — Chinle Triassic
(See Σ471)

Σ562 Lacoptris — Chinle-Triassic
Clathropteris
?
(See Σ471)

Σ563 — Chinle-Triassic
(See Σ471)

Σ564 Sagenopteris — Chinle-Triassic
(See Σ471)

Σ565 Lacoptéris — Chinle-Triassic
(See Σ471)

Σ566 Lacoptéris — Chinle-Triassic
(See Σ471)

Σ567 Otozamites — Chinle-Triassic
(See Σ471)

Σ568 Clathropteris — Chinle-Triassic
(See Σ471)

Σ569 — Chinle-Triassic
(See Σ471)

Σ570 Seed — Chinle Triassic
(See Σ471)

Σ571 Lacoptéris — Chinle-Triassic
(See Σ471)

Σ572 Lacoptéris — Chinle-Triassic

Σ573 Sphenopteris (Fertile) Chinle Triassic
(See Σ471)

Σ574 Laccopteris Chinle Triassic
(See Σ471)

Σ575 Chinle Triassic
(See Σ471)

Σ576 Laccopteris Chinle-Triassic

Σ577 Laccopteris and (Sphenopteris?) Chinle-Triassic

Σ578 Oleoganites ? Chinle-Triassic
Locality #2 in Petrified Forest near Holbrook, Arizona. This locality is near locality #1 and is near the Teepee. I was discovered by Walker and I myself in 1935. (See Σ471 for Loc. #1)

Σ579 Dakota?
(See Σ412 + Σ545)

Σ 580 Otozamites Chinle-Triassic
Nazalini (See Σ460)

Σ 581 [illegible] Chinle Triassic
(See Σ471)

Σ 582 Otozamites Chinle-Triassic
(See Σ471)

Σ 583 Neocalamites Leaves Chinle Triassic
(See Σ578)

Σ 584 Neocalamites Stem Chinle Triassic
(See Σ578)

Σ 585 Neocalamites (Stem and Leaf whorl) Chinle-Triassic
(See Σ578)

Σ 586 Neocalamites (Leaves) Chinle-Triassic
(See Σ578)

Σ 587 Chile Triassic
Nazalini (See Σ 460)

Σ 588

Σ 589 Cordaites [Yuccites] Poleo-Triassic
This leaf was 26 inches long and the tip broken. It was much longer.

Σ 590 Araucarioxylon arizonicum Chile Triassic
Collected in Black Forest July 1935
by L. H. Daugherty. Petrified Forest Nat. Monument
Holbrook, Arizona.

Σ 591 Schilderia adamanica Chinle-Triassic
Collected along neck July 1935
by L. H. Daugherty

Σ 592 Schilderia adamanica Chinle-Triassic
Collected along neck July 1935
by L H Daugherty

Σ 593 [illegible]

Slides made Sept 1, 1936 - Excellent!
Tangential surface shows markings of an insect!

Σ 594 [illegible]

Σ 595 [illegible]

Σ 596

Σ 597 [illegible]

Σ 598 Abies sp. Miocene?

Wood collected by Millard Coots Sept 1931 eight miles west of Ft. Bidwell in small stream bed. Country heavily wooded.

Σ 599 Cretaceous or Eocene.

The petrified piece of wood was found in gravels along with Gryphae tucumcari in Coeta Canyon. Coeta Canyon is a tributary of Palo Duro Canyon near Canyon, Texas ... The exact locality is the base of second falls below Methodist Encampment grounds. This is a dicot wood with medullary ducts. Collected by L H Daugherty in company with Johnston and Mateer of the Canyon Teachers college. August 2, 1935.

Σ 600 Spores and Winged Pollen Triassic

These spores were collected at Locality # 2 near the Tepees in the Petrified Forest National Monument. They were embedded in shale along with Neocalamites and Cycad leaves.

Σ 601 Winged Seed Triassic

Collected at Petrified Forest national Monument by Walker. Exact Locality to be given later.

Σ 602 Araucarioxylon . Chinle - Triassic

Collected on the north side of Marble Canyon near Navajo Bridge by L H D June 1925. Slides made This locality was at base of Vermillion Cliffs

Σ603 Chinle Triassic

Petrified wood collected North of Marble Canyon by L.N.Daugherty - June 1935. This wood was found along the base of the Vermilion Cliffs about 5 miles from the Navajo Bridge on Highway 89.

Σ604 Chinle - Triassic

Collected at same locality as above.

Σ605 Collected at same locality as that of Σ603.

Σ606 Equisetum (sp.?) Chinle - Triassic

Collected at Petrified Forest National Monument, Holbrook, Ariz., by M.Walker. Blue Forest Locality #4.

Σ607 Chinle - Triassic

Leaf collected by M.V.Walker at P.F.N.M. Holbrook, Arizona.

Σ608 Osmundites walkeri Chinle - Triassic

This small stem was collected by M.V.Walker in company with L.N.D near leaf locality #2 in the Blue Forest. Petrified For. Nat. Mon. June 1935.

Σ609 Neocalamites virginiensis (Fontaine) Berry Chinle
Locality #2 Blue Forest, Petrified forest National Monument, Arizona.
Col. L N Daugherty

Σ610 Neocalamites virginiensis Chinle
Blue Forest. Collected by M V Walker 1935

Σ611 Podozamites virginicum Daugherty. Chinle
Blue Forest. Collected by M V Walker 1935

Σ612 Equisetites bradyi nov sp. Chinle
Macrotaeniopteris locality on southeast bank of Dinnebito Wash, nine miles from Diamond Falls, Little Colorado River. The locality is approximately 35 miles north and east of Flagstaff, Arizona.
Col. by Maj. L. J. Brady and L N Daugherty

Σ613 Macrotaeniopteris magnifolia (Rogers) Schimper Chinle
Discovered by Major Brady at a locality 9 miles north east of Diamond Falls, Little Colorado River, Arizona. The locality is on the Southeast bank of Dinnebito Wash about 3½ miles from the only Indian water well in the whole country. You pass the well as you travel up Dinnebito Wash. The locality consists of a low knoll covered with sand and gravel. Very hard to find. Specimens collected by L N Daugherty

Σ 614 Araucarioxylon sp. Benton - Cretaceous

This wood was replaced by $CaCO_3$ and was full of Toredo borings. It was collected in Post Lime Stone of the Benton formation about six miles south of Victoria, Kansas. Collector – George F. Sternberg. Petrifaction poor. Slides made [13].

Σ 615 [redacted] sp. Etchegoin - Pliocene

Sample sent in by Earl B. Smith from Coalinga Extension Center, Fresno State Teachers College. Was broken from a tree on exhibit in front of the Coalinga Junior High School and was found on the South half of [redacted] S 32 - T 20 S - R 14 E, Coalinga quadrangle Etchegoin formation, Pliocene Period. Slides made [redacted] November 12, 1937.

Σ 616 Juniperus sp. Etchegoin - Pliocene

Wood of dark colored opal broken from a larger piece which was found on North half S 32 - T 20 S - R 14 E, Coalinga quadrangle; Etchegoin formation, Pliocene period. Slides made Nov. 12, 1937.

Σ617 Polypoites wardii n.sp. Chinle — Triassic

Heart rot of Araucarioxylon arizonicum.

These appear as rot-like bodies in the stumps and believed to be resin pockets by Ward ('05). He named stumps with these bodies Araucarites monolifer. Thinking the stumps represented a new species. Slides made 11/12/32. This specimen collected at St Johns, Arizona in 1935.

Σ618 Sphenopteris

Petrified Forest National Monument.

Σ619 Sphenopteris

Petrified Forest National Monument.

Σ620 Hyperostolus Chinlensis Triassic

Plant Locality No 1

Petrified Forest National Monument

Σ621 Hyperostolus Chinlensis Triassic

Plant Locality No 1

Petrified Forest National Monument

Σ 622 Coniocarpus plumosa nov. sp.
Locality #1 Petrified Forest National Monument

Σ 623 Eocene??
Collected three miles west of Valley Springs about 100 yards South of the Rockford–Valley Spring highway. This is a petrified wood & an Angiosperm to get unidentified. Collected by Clifford A Anderson
2 slides made
↖ Arampo, Calif.

Σ 624 Celtis
Wood from Burns, Oregon collected by Alfred L Brown. Slides made

Σ 625 Quercus (Black Oak)
[illegible] Σ 624 Slides made

Σ 626 [illegible]
[illegible] Σ 624 [illegible]

Σ 627 Quercus sp (Black Oak)
St Helena, California. Collected back of school grounds.

Σ 628 Psaronius sp. Triassic of Arizona
Moenkopi or Shinarumps

"Trunk collected from locality 8 miles northwest of Winslow, Arizona. Two miles northeast of junction of Leupp Road and the Winslow - Flagstaff highway. Float on Moenkopi evidently derived from adjacent Shinarumps on top of mesa.
June 18, 1942. U. C. Mus. Paleontology Party Collected by Richard Taylor
Locality 200 North." C. L. Camp.

Phyllotaxy 3/8 same as some Carboniferous seed ferns. Slides made. Preservation poor but good enough to prove that this is a stem of Psaronius - A common stem of Permian. This genus has been found with fronds of Pecopteris in the Permian

Σ 629 Cycadeoidea ~~sp.~~ (Paynei ?) Chinle ? [Could be from Jurassic]

This stem specimen was found along the rivers edge a short distance upstream from the Temple of Sinawava in Zion Canyon, Utah. The specimen either came from the Upper Chinle or the Wingate-Kayenta above. The specimen was collected by John Shoen, John Keuch and Larry Wassel of Chicago, Illinois. For further details see letter of Russel K. Grater, Park Naturalist at Zion Canyon, Utah.
Slides made 7/25/43. From the sections and general characters this Cycadeoid is either C. paynei or is so closely related it cannot be distinguished from it by stem anatomy.

Σ630 Cycadeoidea sp Chinle

This stem specimen was collected by workmen near the Blue Forest in the Petrified Forest National Monument near Holbrook, Arizona. Mr Stagner in his letter of Jan. 21, 1941 states that it was collected near a place where some Temporary houses had once stood and there was a possibility that it had been brought into the region. However, it is in all probability a Chinle specimen.

Σ631 Cycadeoidea stantoni Jurassic or Lower Cretaceous ~~sp.~~ California

The locality this poorly preserved stem specimen was discovered is as follows:

Charleston School Quadrangle, Merced County, California. North side of steep gully 1100' N. and 1900' E of S.W. corner of sect. 12, T. 12 S, R. 10E, Charleston School Quad.

This cycad looks like C. stantoni from Shasta formation. It is either C. stantoni or a closely related species. L.H.B

Σ 632 (Seed) Cretaceous ?

This seed was found in Coeta Canyon near Canyon Texas it is a branch running off of Palo Duro Canyon. The rocks contained large palm leaves and must be Cretaceous or younger. It appears to be Cretaceous and like above Dockum.

Σ 633 Osmanthus sp.? Tertiary

This stem was found near Pittsburg, California in the Tertiary. The Collector was not mentioned in Dr Chaney's letter of February 21, 1945. Dr Chaney's number for this wood is "247".

Σ 634 Shale specimens Cretaceous - Mancos

Specimens of the Mancos Shale was collected near Cortez, Colorado, to examine them for Microfossils. This was collected about 10 miles from Cortez on the highway going to Shiprock, New Mexico.
August 19, 1945

Σ 635 Dadoxylon sp. Moenkopi, Triassic

Plant collected near Agathla Peak. Agathla is about 10 miles from Kayenta, Arizona and is on road from Kayenta to Monument Valley National Monument. This fossil was collected on a cliff beyond Agathla and about 10 miles from Monument Valley. Tracks of an amphibian from the Moenkopi were found in this region. The locality was about one mile to right of road on way to Monument Valley.

Σ636 Phytosaur — Chinle - Triassic

Fragment of a Phytosaur skull collected near Greasewood Trading Post in Arizona. Material found in low hills 2 miles north of Greasewood (August 10, 1945)

Σ637 Phytosaur — Chinle - Triassic

Fragment of Phytosaur vertebra. Found at same locality where I found a clavicle of Amphibian in low hills about two miles west of Greasewood, Arizona. This is locality where a complete Amphibian skeleton was found earlier. (Aug 10, 1945)

Σ638 — Chinle? Triassic

Collected by Dr Sam P. Welles in the Zuni Mountains south of Gallup, New Mexico. The location is ½ mile west of highway at Valencia - McKinley County line. This fossil wood may prove to be Araucarioxylon arizonicum. This wood was numbered 64 by Dr Welles. Aug 17, 1945

Σ639 — Moenkopi - Triassic

Collected by Dr S. P. Welles at Holbrook quarry #16 along 66 highway in Arizona. Quarry #16 = N.E. ¼ Sec 31, Twp 18 N, Range 20 E. Possibly fragments of a Neocalamite stem? No. 16 = V3922 of U.C. Mus. Paleo. (Aug 21, 1945)

Σ 640 Moenkopi - Triassic

Collected by Dr S.P. Welles in place in Moenkopi. This appears to be the first Lower Triassic wood from North America! Collected at Moqui Wash about 5 miles west of Winslow, Arizona, and approximately ~~two~~ 2 miles south of railroad — ½ mile west of the telephone pole line. (Aug 20, 1945)

Σ 641 Shinarump - Triassic

Wood fragments collected from the Shinarump Conglomerate near Agathla Peak Aug. 12 & 13, 1945. Samples labeled A to I inclusive. This was to right of road about 1 mile. The road was the Kayenta-Monument Valley road. Locality 5 miles from Agathla on road to Monument Valley, Arizona.

Σ 642 Chinle - Triassic

This stem was collected at Dreamwood, Ariz., and may represent a fragment of a fern stem if it shows structure. Aug. 1945

Σ643 ~~Taxodioxylon~~ ?? Cupressinoxylon ?? Tertiary

Petrified wood collected by Miss Kellogg and Miss Alexander. Sent in by Dr. Camp. The wood was collected 2½ miles North of Mt. Patterson on head waters of Sweetwater Creek at an altitude of 10,500 ft. Bridgeport Quadrangle.
~~Taxodioxylon (Poor preservation)~~

Σ644 Taxa ?? ~~Cupressinoxylon~~ ?? (Plgr)
~~Wood collected~~

Petrified wood collected by Miss. Alexander and Miss Kellogg at same locality as Σ643.
Slides made Jan 1946 - Poor petrifaction.

Σ645 Neocalamites Lower Chinle - Triassic

Branches and xylem of stem of Neocalamites collected in Chinle of Indian Canyon, Utah about 35 miles from Monticello, Utah. The stems and branches replaced by iron. These rested on the Shinarump and were in place. Collected on East wall of canyon below Ranch House on July 14, 1945.

Σ646 Dinosaur Bones and Gastroliths Morrison – Jurassic

About 35 miles from Moab, Utah, on highway that crosses Colorado River and runs north. The locality is on the point of hills back of an abandoned C.C.C. camp. The hills were green in color due to a green shale. This shale was capped by a very dark sandstone and both the sandstone and shale were filled with Dinosaur bones. The bones were very large and gastroliths were common. This is a very ~~common~~ promising locality for anyone with the equipment to collect large Dinosaurs. Collections were made by Dr Sam. P. Welles and L.N. Daugherty on July 14, 1945.

Σ647 Girvanella ? Cambrian

Specimen of Girvanella limestone from Cambrian (Tonto) Bolder in a conglomerate believed to be Cretaceous in age. This was collected by Dr D.G. McKee in the New Water Mountains of Arizona. The specimen is numbered (Acc. No. 1228 - G 2.2405) in the Museum of Northern Arizona, at Flagstaff.

Σ648 Girvanella? Tonto - Cambrian

Obtained specimen of Girvanella limestone from Dr D.G. McKee at Museum of Northern Arizona. This was obtained along with Σ647 at Flagstaff on July 2, 1945. The specimen had been collected by McKee at Peach Springs Canyon, Arizona, in the Tonto Series. It came from the Rampart Cave member of the Mauve [This was once called the Upper Snuff].

The Museum of Northern Arizona number is No. 1033 – G 1.57 [Field No. C-255]

Σ649 Shale from Fish Horizon. Moenkopi - Triassic

Shale collected about 30 miles from Blanding, Utah, below the two peaks called the Bear's Ears. This shale was collected from around "Bertrude" the Fish. This was a beautiful specimen of a Lower Triassic fish discovered by Dr Chas. L. Camp. When Dr Camp and I collected the fish Aug. 4, 1945, I collected shale to be examined for microfossils.

Σ 650 Shale from Lavender Valley — Moenkopi - Triassic

Collected in Lavender Valley about two miles from the point it enters Indian Creek Canyon. Indian Creek is about 35 miles from Monticello, Utah. This shale was obtained when we excavated "Oscar" the amphibian skull. July 1945. The shale was obtained to examine for microfossils.

Σ 651 Shale — Moenkopi – Triassic

Collected shale on west wall of Indian Creek Canyon July 13, 1945 To check for spores and pollen. "ψ11" in note.

Σ 652 Fossil Woods — Shinarump - Triassic

~~Eight~~ Fifteen fossil woods from Shinarump Conglomerate. Collected in vicinity of Bear's Ears about 35 or 40 miles from Blanding, Utah, Aug 1, 1945. These woods were collected along road at Maverick point about 2 miles from Maverick Spring.

Σ653 Wood — Shinarump - Triassic

This wood was collected at Bear's Ears in a green shale below the conglomerate and believed to be Shinarump - the same as the conglomerate above. Aug 4, 1945

Σ654 — Shinarump - Triassic

Two pieces of Fossil wood from the Shinarump of Indian Canyon. July 1945

Σ655 — Shinarump - Triassic

Wood collected at Indian Creek Canyon about 35 miles from Monticello, Utah, on July 16, 1945

Σ656 — Shinarump - Triassic

Wood collected on West wall of Indian Creek Canyon. This was taken from fossil log embedded in Shinarump Cgl. on July 13, 1945 (No. Ψ13 in Field Notes)

Σ657 — Shinarump - Triassic

Wood collected in a Shinarump boulder at a hill in Indiancreek Canyon. Hill had an Indian Ruins. [No. Ψ7 in Field Note Book]

Σ 658 Shmaumps Wood

Taken in place on West wall of Indian Creek Canyon. [ψ 12 in Field Note Book]

Σ 659 Lower Chinle - Triassic

Wood taken from log in Chinle resting on Top of Shmaumps conglomerate. [ψ 14 in field notes] Indian Creek

Σ 660 Chinle - Triassic

Eleven fossil woods collected from Chinle of Dreesewood, Arizona, on Aug 10, 1945.

Σ 661 Lower Chinle

Eight fossil woods collected from East wall of Indian Creek Canyon. [Field notes numbers ψ 15 - 16 - 17 - 18 - 19 - 20 - 21 - and 22] m. Monticello

Σ 662 Chinle - Triassic

Wood from Chinle at Moab Utah. This wood was collected on the John Jackson Ranch about 5 miles from Moab

Σ663 Chinle - Triassic

Wood from Chinle of Indian Creek, Utah [near Monticello]

Σ664 Chinle - Triassic

Wood and bone fragments collected at Dreeswood, Arizona, Aug 10, 1945.

~~Σ665~~ Chinle - Triassic

Wood from Indian Creek Canyon, about 35 miles from Monticello, Utah. The Indian Creek Canyon is owned by Shoups and Summerville and is one of the largest cattle ranches in the United States.

Σ665 Shmaruns - Triassic

Wood from Shmaruns in vicinity of Bear's Ears. Collected by Dr Sam P. Welles on Aug. 6, 1945

Σ666 Shmaruns - Triassic

Collected at Maverick point - near Bear's Ears, Utah, on Aug 1 1945.

Σ 667 Palmoxylon Tertiary

Specimens collected by Pratt Greer of Holbrook, Arizona. They were collected in Tertiary gravels near Holbrook and given to me on July 3, 1945. No Ψ 5 in Field note book.

Σ668 Juglans sp. Tertiary - San Pablo Fm - Miocene

This wood was sent in by Dr Ralph W. Chaney Oct 11, 1946. It was collected in the San Pablo formation near Pittsburg, California.

Σ669 Recent

Charcoal from Ventana Cave (Upper Cave). This charcoal came from Dr Emil W Haury's locality "C 5". He states it is more recent than [illegible]

Σ670 Recent

Charcoal from Ventana Cave (Upper Cave) [illegible]

It is in the same as above but from "Test Pit A-7". See Dr Haury letter of Oct 3, 1947.

Σ671 Pleistocene

These specimens of charcoal came from the lower ~~Gravel~~ Pinedale and came from a stony layer with the sloth, bison, and tapir, etc. And is much older than charcoal Σ669 and Σ670. This was mark "ash". For any other information, see Dr. Reeve's letter of Oct. 3, 1947.

Ø672 Metasequoia ~~glyptostroboides~~ ~~langsdorfii~~ glyptostroboides Hu and Cheng
Collected in China by Dr. R.W. & Raney

Σ673 Lower Gila Gravels

This petrified wood is from the lower ~~Gila~~ Gravels of Southeastern Arizona. Sent in by Carl B. Alexis of University of Arizona at Tucson. The specimens were collected from the area in which his classic original material of this Pliocene is contained in the Hualpai Mountains, Arizona.

Σ674

From Eugene A. Olson
133 Coolidge
Coalinga, Calif.

To [illegible]
Sa.

This wood was collected 7000 feet below surface in middle dome of [illegible] Hills (See Letter from Mr Olson)

Ø675 Cortocarpus sp (Breadfruit) Truck Atoll

This wood of the Breadfruit came from Fefan Island in Truck Atoll of the Caroline Islands. The natives of Fefan Island specialize in wooden dishes and make them from the wood of the Bread Fruit. This piece of wood was collected by Ralph Shaw. he obtained it from the base of a platter made by the natives.

Ø676 Metasequoia ~~[illegible]~~ glyptostroboides Hu and Cheng
Collected in Shui-hsa-pa "Valley of the Tiger"
100 Miles south of Mo-tao-chi. Sent to me by Dr Chaney who collected it. He also sent 100 seed that I gave to Rocci Pozano to plant.

Σ677 Dadoxylon sp Permian or Lower Triassic
This wood was collected by
Robert G. Rodin in December 1947
Orientated at Kaokoveld near Brandbergfontein
South West Africa.

Σ678 Dicot Lowermost Cretaceous
(Valor 1) This fossil wood was collected by a
California student in lowermost Cretaceous
More information will be collected from Dr Chaney
Valor 1 from Antelope shale

Σ679 Lowermost Cretaceous
(Valor 2) Same as Σ678 A gymnosperm
with teredo borings. From Antelope Shale.

Σ 680 Lowermost Cretaceous
(Valor 3) Antelope Shale
A gymnosperm from locality above

~~Σ~~ 681 Pseudotsuga + Oak Recent

This wood is supposed to be from two ships commanded by Drake! I think it come out of Drake's Bay, Oregon. Details will be supplied later. A letter sent to Chaney about identification of this wood.

Σ 682 Taxodium dubium Ster Latah – Miocene

Collected by Robert W. Hawley ~~et~~

6 miles south of Kendrick, Idaho, in a road cut on right hand side of road as you go south. Easy to find as it is an ash shale the rest is lava. The road cut is just above Payette River. In the ~~Latah~~ Latah formation.

Σ 683 Quercus spokanensis Berry Latah – Miocene

Collected by Robert W. Hawley 6 miles south of Kendrick, Idaho, in a road cut on right hand side of road as you go south.

For Latah plants from Idaho see Prof. Paper 185-E U.S. Dept of Interior 1934. also Fossil Flora of the Latah - US GS Paper 40, ~~p~~ 1926.

Σ 684 Taxodium dubium (Sternberg) Ster Latah – Miocene

Same as Σ 682.

Σ 685 Taxodium dubium Heer — Latah-Miocene
Same as Σ 682

Σ 686 Populus — Latah-Miocene
Same as Σ 682

Σ 687 — Latah-Miocene
Same as Σ 682

Σ 688 ~~Populus Cercis idahoensis Berry~~ — Latah-Miocene

Σ689 Medulloza sp (Myeloxylon) Upper Carboniferous
Slide from a silicious coal ball from France. Slide with beautiful structure.
Coal ball fragment obtained from Dr Weland of Yale University.
Also an unidentified stem.

Σ690 Monanthesia? Ladd Formation
Pleasants Member
A cycad from Santa Ana Mts in Southern California. Sent in by Dr Ralph W Chaney on March 8, 1950. Label had the number K102.

~~Σ691~~

Σ691 Sequoia (Metasequoia)? Ladd Formation
Appears to be from same locality as Σ690

Σ692 Sequoioxylon (Metasequoia or Sequoia) Cretaceous
From area north of Virginia City, Nevada.
Collected by Dr Muller of Stanford.
See letter of George A Thompson.
Since this is a typical Sequoia wood and the rocks, according to Thompson, are Pre-Tertiary they must be Cretaceous. One Sequoia has been collected in Jurassic of France but none in N.A. Sequoia wood is common in Cretaceous.

The following numbers from Σ 693 to Σ 759 were collected by Quin A. Blackburn on the Byrd Antarctic Expedition II

Σ 693 Glossopteris

Collected by Q. A. Blackburn on Byrd Antarctic Expedition II. This specimen was collected on Thorne Glacier, or more exactly, on Mt Weaver at the head of Thorne glacier Specimen shows leaves in Sack No. Q.A.B. 161

Σ 694 Glossopteris

Collected by Quinn A Blackburn on Byrd Antarctic Expedition II. Specimen shows leaves Sack no. - Q.A.B. 168

Σ 695 glossopteris coal

Collected by Q.A.B on Byrd antarctic Expedition II. Piece of impure coal. Sack no. - QM 71.

Σ 696

Sack no. Not in Sack but appears to have been from same locality as Σ 693 and Σ 694.

Σ697

Narrow leaves - Sack no. QM 70

Σ698

Sandstone containing carbonaceous, flattened stems
Sack no Q.A.B. 160

Σ699 Small specimen with scraps of leaves in Sack no. QM-75

Σ700

Sandston containing fragments of stems
in a Byrd Antarctic Exp II sack with no number.
apparently from same locality as Sack Q.A.B.-160

Σ 701

Specimen containing leaves in sack no. QAB-#25

Σ 702

Good leaf specimens in sack no. Q.A.B.- QMGP #31
This sack was contained in another sack Q.M. 67.

Σ 703

A lignitic coal with leaf impression on surface.
Sack no. Q.A.B. - Q.M.G.P. #26

Σ 704

Piece of carbonaceous shale in sack no. Q.M.- Q.A.B. 179

Σ 705 Glossopteris
Leaf segment with excellent vein preservation.
In sack no. Q.A.B.-QM.GT #20.

Σ 706 Glossopteris
Scraps of leaves in sack no. QM ~~#~~ 72

Σ 707
Piece of igneous rock sack no. QAB #185

Σ 708 Glossopteris Permian
Small scrap with leaf impression sack no. – Not found in numbered sack.

Σ 709 Glossopteris
Specimen showing a Broad Leaf. Sack no.
This sack had – number.

Σ 710

An igneous rock containing lichens [living].
The sack unnumbered but a note in the sack
"Mt Helen Washington Dave" would indicate
it was from a mt. in Antarctica named in honor of Mt Helen, Wash.
[Mt. Helen Washington is in the Rockefellow Mts and Dave is possibly
David Paige.]

Σ 711 Glossopteris Permian

An important specimen with many leaf impressions
Sack no. Q.M. #6.

Σ 712 Glossopteris Permian

A fine specimen that was not in a numbered
sack

Σ 713 Glossopteris

A fine specimen that was in a large unnumbered
sack with many other specimens, including Σ 712.

Σ 714 Glossopteris Permian
A fine specimen of a very broad leaf.
In sack no. 55

Σ 715 Coal Permian
A specimen of coal in an unnumbered sack.

Σ 716 Large specimen showing stem and possibly a seed?? In large Byrd Exp. II sack not numbered.

Σ 717 Glossopteris Permian
A dark grey shale containing black leaves and stem fragments. In large Byrd Ant. Exp. II sack without number

Σ 718

A rock showing lines of flow or possibly a fossil wood??
In sack no. QAB. #192

Σ 719 Glossopteris Permian
Small scrap with leaves in sack no. QAB – 175.

Σ 720 Glossopteris Permian
Leaf fragments in sack no. QAB – 88

Σ 721 Shale Permian
Small sample of carbonaceous shale. In sack no. 187

Σ 722 Glossopteris Permian
Thin slab with leaves – fig. colored shale. In sack QAB – QM, GP #23.

Σ 723 Glossopteris

Fragment with leaf impressions. In sack no. QM. #22

Σ 724

Fragment with broken bits of stem. Sack no QAB-QM-182

Σ 725 Glossopteris Permian

Fragment with leaves. Sack no. QM-QAB-163

Σ 726 Shale Permian

Black shale with stem fragments. Sack no. QAB #162

Σ 727 Shale Permian

Black shale. Sack QAB.- 157

Σ 728 Equisetites — Permian
Black Carbonaceous shale with stem of Equisetites.
In sack no. Q.M. 68.

Σ 729 Glossopteris
Black shale with leaf impressions. Sack - QM 73.

Σ 730 Coal (Formed of Glossopteris leaves) — Permian
Coal specimen. Sack Q.A.B. - QMGP #32

Σ 731 Glossopteris and unknown stems — Permian
Shale with leaf and stem fragments.
Sack - no number.

Σ 732 Coal — Permian
Coal specimen. Sack QM #66

Σ 733 Shale — Permian of Antarctica
Black shale. Sack no. Q.A.B. #380.

Σ 734 Unknown stem — Permian
Sandstone with stem fragment. Sack QAB #19

Σ 735 Bituminous Shale — Permian
Carbonaceous shale or impure coal. With carved surface.
Sack no. Q.A.B. 132.

Σ 736 Sandstone — Permian
Small piece of sandstone. Sack no. QAB 158

Σ 737
Small piece [illegible] (with dolomite crystals?)
sack. QM #97

Σ 738 Carbonaceous shale with wood fragment. Sack QAB 181

Σ 739 Same as Σ737. Sack Q.A.B. #195

Σ 740 Glossopteris Permian
Plant with narrow leaf. Sack QAB-QMRGP #39.

Σ 741 Glossopteris Permian
Fragment containing leaves. Sack Q.A.B. 172

Σ 742 Glossopteris Permian
Coarse sandstone Sack Q.A.B. 195

Σ 743 Coal Permian
Specimen of Coal. Sack Q.M. - 36

Σ 744 Track of an unknown animal Permian
Tracks of an animal !? Important
Sack no. QAB - 191.

Σ 745
Dark greenish rock - possibly good for pollen ?
Sack no. No number on sack.

Σ746
Laminated rock - Try for pollen. Sack QM #

Σ 747 Glossopteris Permian
Shale with many leaf impressions well preserved. Sack no. QAB #21

Σ 748 Permian
Sandy dark shale - Try for pollen. Sack - QAB - 86

Σ 749 Piece of granite. Sack #301

Σ 750 Crystals - Sack Q.A.B. 142

Σ 751 Try for pollen. Sack QAB - QMRGP # 15

Σ 752 Argillite?? Sack QAB - [illegible] 87

Σ 753 Glossopteris Permian
Specimen with leaves and stem fragments.
Sack - No number

Σ 754 Glossopteris Permian
Large specimen with leaves. No number on Sack.

Σ 755

Angular conglomerate (arkose) with roots ?? Sack Q.M. 64

Σ 756

Sandstone ~~with~~ varves?? Pollen possible.
Sack no. QAB 199.

Σ 757

~~Shale or impure~~
Shale or impure coal. Sack Q.AB. # 165

Σ 758

Laminated sandstone? Sack QAB #186

Σ 759

Carbonaceous sandy fragment. Sack QAB #130

Σ 760

Sequoiaxylon
Tree 45 ft in circumference. Tertiary of Nevada From Washoe County, Nevada — 45 miles north of Gerlach. Col. by Neil Muraraga. (See Arnold's - Introduction to Paleobotany for photograph (page 36) ~~for~~ of this stump or one in same group.

Σ761 Araucaria brasiliana Lamb. (Pinho do Parana)

Trade names
Parana Pine
Brasilian Fir

[shipped to U.S. to sell as lumber.] 11/29/51

Obtained by Allen Jacobs.

Σ762 Antarctica Σ762 to Σ924

Carbonaceous shale. Sack no 140.
Collected by Q. Blackburn, Russel and Payne
207 miles from South Pole at head of Thorne Glacier.
Queen Maud Range

Σ763 Antarctica

Shale and Coal. Two fragments Σ763 and Σ763D
Sack 104 [2 PB]

Σ764 Antarctica

Coal Fragment Sack 116

Σ765 Antarctica

Varved Sandstone. Sack QM 74

Σ766 Shale fragment Sack 101

Σ767 Coal Sack 166 Antarctica

Σ768 Coal fragment Sack 124 Antarctica

Σ 769 Antarctica
Shale Sack 171

Σ 770 Shale Sack 171 Antarctica

Σ 771 Antarctica
Σ 772 Shale fragments in Sack 141
Σ 773
Σ 774
Σ 775
Σ 776
Σ 777
Σ 778
Σ 779

Σ 780 Antarctica
Σ 781 Sandstone + shale Sack 79
Σ 782 Σ 780 appears to be petrified wood!
Σ 783

Σ 784 Antarctica
Σ 785 Sandstone fragments Sack 125

Σ 786 Antarctica
Σ 787 Coal and Shale fragments Sack 99
Σ 788
Σ 789

Σ 790	Shale with leaf impressions.	Antarctica Sack 112
Σ 791	Shale fragment	Antarctica Sack 118
Σ 792, Σ 793	Shale fragment	Antarctica Sack 111
Σ 794	Coal	Antarctica Sack no. 80
Σ 795	Coal Fragment	Antarctica Sack no. 111
Σ 796, Σ 797	Coal and shale fragments	Antarctica Sack no. 92
Σ 798, Σ 799, Σ 800	Shale fragments	Antarctica Sack no. 82
Σ 801	Coal fragment	Antarctica Sack no. 102
Σ 802	Shale fragment	Antarctica Sack no. 139

Σ803
Σ804
Σ805
Σ809
Σ810
Σ811
Σ812
Σ813

Antarctica
5 small fragments of shale Sack no. 81

Note- numbers Σ806, Σ807 and Σ808 not used.

Σ814

Antarctica
Shale fragment Sack no. 83

Σ815 Glossopteris Antarctica
Shale with good leaf impressions. Sack no. 24 (QMGP)

Σ816

Antarctica
Sandstone fragment Sack no 135

Σ817 Oolitic? Antarctica
Sack no. 113

Σ818
Σ819
Σ820
Σ821
Σ822
Σ823
Σ824
Σ825

Antarctica
Shale and coal fragments Sack no. 144

Σ 826 Σ 827 Σ 828 Σ 829	Shale fragments	Antarctica Sack No. 135
Σ 830	Shale fragment - leaf impressions - good veination.	Antarctica Sack No. 119
Σ 831 Σ 832 Σ 833 Σ 834 Σ 835	Shale and coal fragments.	Antarctica Sack no. 129
Σ 836	Sandy shale	Antarctica Sack 155
Σ 837	Black shale	Sack no. 137
Σ 838 Σ 839	Shale fragments	Antarctica Sack no. 127
Σ 840	Sandstone fragment	Antarctica Sack no. 145
Σ 841	Shale? fragment	Antarctica Sack no. 120

Σ842
Σ843
Σ844
Σ845

Antarctica
Shale Fragments — Sack no. 174
Σ845 may be carbonized wood - also 843

Σ846

Antarctica
Fragment — Sack no. 147

Σ847
Σ848

Antarctica
Shale fragments — Sack no. 152

Σ849

Antarctica
Coal — Sack no. 90

Σ850
Σ851

Antarctica
Oolitic? — Sack no. 115

Σ852
Σ853

Antarctica
Coal — Sack no. 143

Σ854
Σ855

Antarctica
Shale. — Sack no. 126
Σ855 appears to have fragments of vertebrata

Σ856
Σ857
Σ858

Antarctica
Σ856, and Σ857 fossil wood? — Sack no. 173
Σ858 Shale?

Σ859
Σ860

Antarctica
Coal — Sack no 94

Σ861, Σ862	Red Shale fragments	Antarctica Sack No. 76
Σ863, Σ864	Shale fragments	Antarctica Sack no. 85
Σ865, Σ866, Σ868	Coal + Shale fragments	Antarctica Sack no. 96
Σ867	fragment	Antarctica Sack no 114
Σ869, Σ870	Shale fragments	Antarctica Sack no. 136
Σ871	Shale fragment	Antarctica Sack no 100
Σ872, Σ873	Shale fragments	Antarctica Sack no 91
Σ874	Shale leaf impressions Seed ??	Antarctica Sack no 150
Σ875, Σ876	Shale fragments	Antarctica Sack no. 110
Σ877, Σ878	Σ877 with leaf impressions	

Σ 879	Core ??	Antarctica Sack no. 128
Σ 880, Σ 881	Shale fragments	Antarctica Sack no. 121
Σ 882	Shale fragment	Antarctica Sack no. 123
Σ 883	Shale fragment	Antarctica Sack no. 105
Σ 884, Σ 885	coal fragments	Antarctica Sack no. 170
Σ 886, Σ 887	Shale fragments	Antarctica Sack no. 77
Σ 888	Shale fragment	Antarctica Sack no. 148
Σ 889, Σ 890, Σ 891	Shale fragments	Sack no. 98
Σ 892	Sandstone	Antarctica Sack no. 108

Σ893
Σ894
Σ895
Σ896
Σ897
Σ898
Σ899

Antarctica
Coal fragments Sack no. 134
Σ898 is carbonized wood

Σ900
Σ901
Σ902
Σ903
Σ904
Σ905

Antarctica
Sack no. 138
Shale fragments.
Σ901 may be carbonized wood?

Σ906

Antarctica
Shale Sack no. [redacted] 133

Σ907

Antarctica
Pegmatite? Sack no. 52

Σ908 Shale - Leaf impression Sack no. 109

Σ909

Antarctica
Shale Sack no. 103

Σ910

Shale with small bromides?? Sack no 184

Σ 911 Σ 912	Coal	Antarctica Sack no. 117
Σ 913 Σ 914	Coal	Antarctica Sack no 122
Σ 915 Σ 916 Σ 917 Σ 919 Σ 920	Shale fragments	Antarctica Sack no. 115
Σ 921 Σ 922	Carbonized wood	Antarctica Sack no. 154
Σ 923 Σ 924	Shale fragments	Antarctica Also Sack no. 154 as above
Σ 925		Triassic

These specimens were sent by Mr Olson Geology Dept., W.S.C., Pullman, Washington. Triassic wood? that I was supposed to identify but letter is misplaced. Slides were made

Σ926 Coal Ball Paleozoic

Collected ca. 1 mile north of Bridgeport, Texas, at an abandoned mine where farmers obtain coal. The mine is nothing more than a pile of shale and slag about 15 feet in height. Another slag pile is in field across the road but was not examined. This coal ball appears to have a lepidodendron branch running through it. Slides to be made later.

Σ927 Coal Ball

Collected ca. 1 mile north of Bridgeport, Texas
Same locality as Σ926

Σ928 Coal Ball

Locality same as Σ926

Σ929 Coal Ball

Locality same as Σ926

Σ 930

Same as Σ 926

Σ 931

Same as Σ 926

Σ 932

Same as Σ 926

Σ 933

Same as Σ 926

Σ 934

Same as Σ 926

Σ 935

Same as Σ 926

Σ 936

Same as Σ 926

Σ 937

Same as Σ 926

Σ 938

Same as Σ 926

Σ 939

Same as Σ 926

Σ 940

Same as Σ 926

Σ 941
(S-1792)

Sakaka Sandstone -

Petrified wood sent in by Nestor J. Sonder for the Arabian American Oil Co. The locality for this wood marked "S.1792 came from Jauf Quad. Sakaka sandstone, Seven kilometers east of Sakaka along road to customs station (29° 59' N., 40° 02' E) Fossil wood from abundant occurrence, approximately 200 meters below top of Sakaka sandstone. Collected by geologists of Arabian American Oil Co., Dec 27, 1951.

Σ 942
(S-1792)

Sakaka Sandstone -

Same Locality as Σ 941.

Σ 943
(S-1792)

Sakaka Sandstone -

Same Locality as Σ 941.

Σ 944 Sakaka Sandstone –
(S-1792) Same locality as Σ 941

Σ 945 Dymorapora Sakaka Sandstone –
(S-1792) Same locality as Σ 941
No cell structure in thin sections but [illegible] rings appear those of a [illegible] Of the [illegible]
[illegible]

Σ 946 Sakaka Sandstone –
(S-1792) Same locality as Σ 941

Σ 947 Sakaka Sandstone –
(S-1792) Same locality as Σ 941

Σ 948 Sakaka Sandstone –
(S-1792) Same locality as Σ 941

Σ 949 (S-1792) — Sakaka Sandstone - Same locality as Σ 941

Σ 950 (S-1792) — Angiopteris? Sakaka Sandstone - Same locality as Σ 941

Σ 951 (S-1792) — Sakaka Sandstone. Same locality as Σ

Σ 952 (S-1792?) =(S-1662) — Sakaka Sandstone? Wood questionable believed to come from same locality as Σ 941. Sawed from specimen Σ957

Σ 953 (1792?) =S-1662 — Same wood and locality as Σ957 Sakaka Sandstone? ~~and believed to come from same locality as Σ941~~. Sawed from Specimn Σ957

Σ 954 (S-1017) — Dadoxylon (indicum?) Khuff Limestone - Permian. Several specimens of the same wood from the following locality. Saih ed Dabul. Permian or older Khuff limestone, 40.9 to 46.9 m above the granite contact, approximately 14.7 kms. S 51 W of the white jebel at Saih ed Dabula, 25° 36.4' N., 45° 38.06' E. Collected by geologists of Arabian American Oil Co on May 19, 1945.

160

Σ 955 [illegible] : Mustawi formation? Triassic?
(S-805)

Collected June 18, 1940. Sent to L.N. Dunkerly by Nestor J. Sander of the Arabian American Oil Co. 505 Park Ave., New York, N.Y. The collection was made by geologists of the Arabian American Oil Co. in Arabia.
Locality: [Arabian Oil Co Locality S-805]
" Age uncertain: Mustawi formation?: Wadi Dawasir
Lithological sample from continental beds, 10.5 km. S. 71° W. of Khashm El Amur. Lat. 20° 27' N., Long 45° 18' E (June 15, 1940). Triassic?
Wood replaced by limonite.

Σ 956 Araucarioxylon sp Ez Sirr Formation(?) Triassic(?)
(S-1193)

Collected in Arabia by geologists of the Arabian-American Oil Co. Jan. 30, 1948 and sent to L.N. Dunkerly by Nestor J. Sander of the Arabian American Oil Co. on Oct. 5, 1952.
A.A. Oil company locality number S1193.
Locality:
Dhruma Quad. Ez Sirr Formation(?) (Triassic?)
Fossil wood from lower limestone below main Jurax limestone at eastern end of Safra el Mirikah (24° 38' N., 45° 54' E.)
Note
Slides made. A typical Araucarioxylon that resembles Araucarioxylon arizonicum. This is a common Triassic type but does not prove beyond a doubt it is from Triassic. The indication is that Ez Sirr Formation is Upper Triassic.

Σ 957 (S-1662) Wasia Formation – Middle Cretaceous

Arabian-American Oil Co., ~~Formation~~ locality S1662

Locality: S-1662

Saila Quad. Wasia Formation (Middle Cretaceous)
Fossil wood on slope of northern Jebel Nahaidain.
(22°07' N., 47° 08.15' E) (Oct. 22, 1951).
Data on this as to Lower or middle Cretaceous
would be very valuable.

Σ 958 Cupressinoxylon sp. Upper Cretaceous

Collected by Creole Oil Co. in Venezuela.
Wood sent to me by Sam Wells (See his letter of Mar 2, 1953)

Σ 959 Tertiary – Pliocene

Small branch fragments replaced by iron
and should have structure. These specimens were
collected by C. W. Sharsmith from Copper Canyon
on west slope of Funeral Range at an altitude
of 2000 ft. Death Valley, California. Mar. 14, 1953
For further information refer to Floyd Kibler, Park Naturalist,
Death Valley National Monument. These stems occur
along with Camel, Elephant, Peccary, and Saber Tooth Tiger(?) Tracks.

162 [Σ960 B Palaeohalidrys californica]

Σ960 [Σ960 A Cystoseira occidentalis]

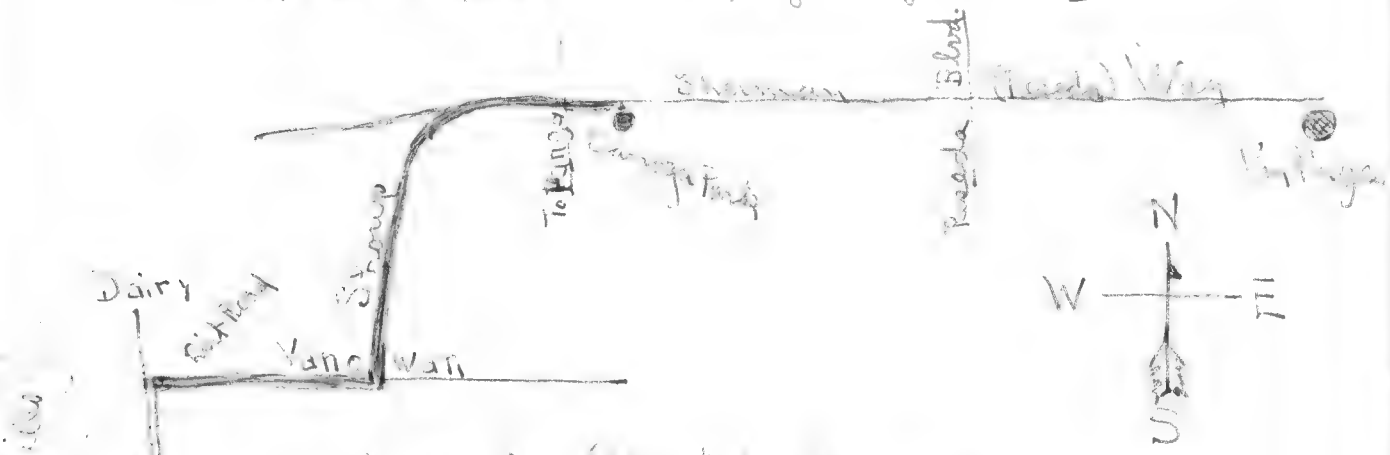
Miocene

~~Tertiary~~ ?

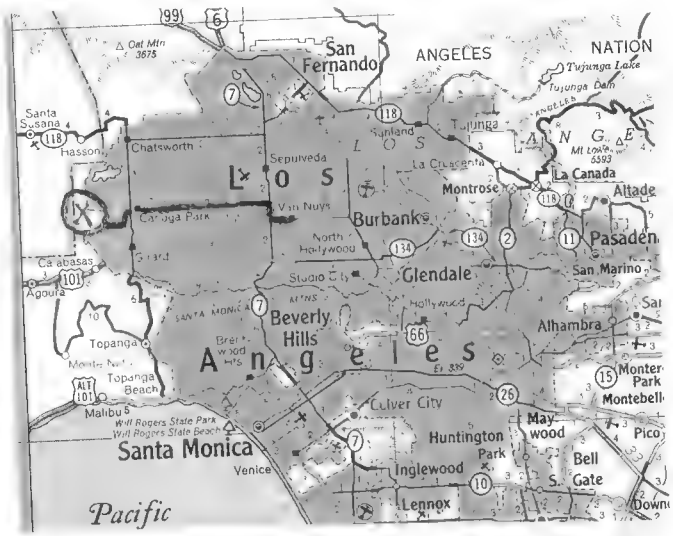
To find locality go to Van Nuys on Los Angeles District and go due West to Canoga Park on Sherman (Reseda Way). Go to Knapp's Kitchen Kupboard on Canoga and ask way to Dry Gulch Ranch. Obtain further information from Joellen Knapp's uncle if can't find Knapps for additional information.

[The locality appears to be about 3 miles north of Calabasas]

[Knapp's kitchen cupboard is Miss Knapp's father's food store.]



Map to locality in Calif. as obtained by Miss Knapp.



For a description of these specimens (Σ960 A and Σ960 B) see

Gardner, N.L. Two Fossil Algae from Miocene. Acad. Nat. Sci. of Phila. Vol. LXXV pp. 361-363. 1923.

See Drawer Ceno. G.

Σ 961 Rhetoxylon Morrison?

Collected in Henry Mountains of Utah about 9 miles South West of Mt Hillers and about 2 or 3 miles west of Hansen Creek. This locality is also about 6 miles due west of Mt. Ellsworth.
Collected by

Σ 962 Quercus sp. (Live Oak) Pleistocene

Curtner Ranch north of Alameda County Line, 3 miles north of Milpitas on old highway.
This quarry can be observed from the old highway and is approximately ½ mile from it. This excavation was made by workmen obtaining material for fills on new highway. The workmen also found a Tusk and bone of Mammoth.

Σ 963 Platanus Tertiary ?

Collected on a hill on the road to Independence Mine. N.E of Mount Diablo.
Collected by Wilhelm Haedler 1835-1904, San Francisco, Calif.

Series 15

☐ ø339 Eupylophora paraensis Hnb.

Mr. Chas. J. Smith, Superintendent
Petrified Forest National Monument
Holbrook, Arizona.

Mr Harold S. Colton, Director
Museum of Northern Arizona
Flagstaff, Arizona.

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Ariz.

Dr. Chas. Merriam
Department of Paleontology
Cornell University
Ithaca, N.Y.

Mr G. H. Bradley
Mesa Ranch School
Mesa,
Arizona.

Ex
1/50

R.R. Mahan - Houck, Ariz.
(Dealer in Fossil Wood from small forest in this place)

Charles H. Jacobs - Navajo, Ariz.
Dealer in Fossil Wood from ~~small~~ black forest etc.

Dr. Barnum Brown
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